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EDMONTON

ANNUAL REPORT

OF THE

Department of Public Health

OF THE

PROVINCE OF ALBERTA

1929

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
Printed by W. D. McLean, King's Printer
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Edmonton, December 8, 1930.

To His Honour

WILLIAM EGBERT,
Lieutenant Governor of the Province of Alberta.

SIR:—

I have the honour to transmit herewith the Annual Report of the Department of Public Health for the year 1929.

I have the honour to be, Sir,

Your obedient servant,

GEORGE HOADLEY,
Minister of Health.

Edmonton, December 8, 1930.

To the Honourable George Hoadley,
Minister of Health,
Parliament Buildings, Edmonton, Alberta.

Sir:—

I have the honour to submit the Eleventh Annual Report of the Department of Public Health.

The Department is divided into the following Branches:

1. Communicable Diseases.
   (a) Public Health Educational Division.
2. Hospital Inspection and Coroner's Supervision of Operations.
3. Laboratory.
4. Nursing.
5. Hospitals, Charity and Relief.
6. Social Hygiene.
7. Sanitary Engineering and Sanitation.
8. Provincial Dentist.
9. Institutions: Central Alberta Sanatorium.
   Provincial Mental Hospital.
   Provincial Mental Institute.
   Provincial Training School.
   Provincial Special Hospital.

I have the honour to be, Sir,

Your obedient servant,

M. R. Bow,
Deputy Minister.

Communicable Diseases Branch

(A. C. McGugan, M.D., *Provincial Medical Officer.*)

The following is a table showing the number of cases of communicable diseases which have been reported in the Province in 1928 and 1929:

Disease.	1928.	1929.
Anterior Poliomyelitis	92	29
Cerebro–spinal Meningitis	54	49
Chickenpox	1522	2482
Diphtheria	485	568
Encephalitis Lethargica	6	2
Erysipelas	85	126
German Measles	21	121
Measles	892	3857
Mumps	1277	2785
Scarlet Fever	1397	1731
Smallpox	254	94
Tuberculosis (Pulmonary)	168	215
Typhoid Fever	122	114
Paratyphoid Fever	.....	37
Whooping Cough	492	1214

TOTAL DEATHS DUE TO COMMUNICABLE DISEASES IN THE PROVINCE OF ALBERTA DURING THE YEAR 1929

Pneumonia (all forms)	561	Meningococcal Meningitis	42
Influenza (sole cause)	64	Typhoid Fever	26
*Pulmonary Tuberculosis	321	Erysipelas	31
Tuberculosis (all other forms)	70	Scarlet Fever	45
Diphtheria	64	Encephalitis Lethargica	13
Whooping Cough	70	Measles	82
Poliomyelitis	8	Mumps	3
Smallpox	—		

*Deaths from Tuberculosis among Indians reported. Cases not reported.

DEATHS DUE TO COMMUNICABLE DISEASES IN THE CITIES OF EDMONTON AND CALGARY DURING 1929

CALGARY

Pneumonia (all forms)	74	Meningococcal Meningitis	8
Influenza (sole cause)	4	Typhoid Fever	1
Pulmonary Tuberculosis	19	Erysipelas	7
Tuberculosis (all other forms)	5	Scarlet Fever	6
Diphtheria	13	Encephalitis Lethargica	1
Whooping Cough	2	Measles	7
Poliomyelitis	—	Smallpox	—

EDMONTON

Pneumonia (all forms)	77	Meningococcal Meningitis	8
Influenza (sole cause)	3	Typhoid Fever	1
Pulmonary Tuberculosis	49	Erysipelas	8
Tuberculosis (all other forms)	21	Scarlet Fever	4
Diphtheria	4	Encephalitis Lethargica	4
Whooping Cough	8	Measles	14
Poliomyelitis	2	Smallpox	—

DEATHS DUE TO COMMUNICABLE DISEASES IN THE SMALLER CITIES, TOWNS, VILLAGES AND RURAL DISTRICTS DURING THE YEAR 1929

Pneumonia (all forms)	410	Meningococcal Meningitis	26
Influenza	57	Typhoid Fever	24
Pulmonary Tuberculosis	253	Erysipelas	16
Tuberculosis (all other forms)	44	Scarlet Fever	35
Diphtheria	47	Encephalitis Lethargica	8
Whooping Cough	60	Measles	61
Poliomyelitis	6	Smallpox	—

Typhoid Fever.

114 *cases*—26 *deaths.*

The average death rate in Typhoid Fever is about ten per cent. of the total cases. Either the above reported cases were unusually

severe or there has been laxity in the matter of reporting Typhoid Fever cases.

Several small outbreaks occurred in camps and institutions. The advisability of inoculating against Typhoid Fever, especially in camps and in any locality where the existence of a carrier is suspected ,cannot be stressed too strongly.

Public attention is directed especially to Section 42 of the Public Health Regulations (1930).

Scarlet Fever.

1731 *cases*—45 *deaths.*

The history of Scarlet Fever in the Province is much the same as in previous years. A proportion of the mild cases has escaped recognition and the infection has spread as a result.

Smallpox.

94 *cases*—0 *deaths.*

One outbreak was responsible for over fifty per cent. of the above cases. Failure to detect the nature of the disease in the first cases was responsible for the spread.

Diphtheria.

578 *cases*—64 *deaths.*

Some municipalities have eliminated Diphtheria entirely by the use of Diphtheria Toxoid. The Department will not be satisfied until every susceptible individual in the Province has been immunized against the disease.

Cerebro-spinal Meningitis.

49 *cases*—42 *deaths.*

While the cases here reported are the Meningococcic type, some of the deaths were probably due to Meningitis caused by organisms other than the Meningococcus.

Pulmonary Tuberculosis.

215 *cases*—*321 deaths.

The reporting of Tuberculosis and the necessary attention to known cases is still far from satisfactory. Better control of the disease cannot be expected until the known cases are fully reported and patients and contacts are promptly controlled and instructed.

*Deaths from Tuberculosis among Indians reported. Cases not reported.

Poliomyelitis.

29 *cases*—8 *deaths.*

The incidence of both cases and deaths shows a decided improvement over the 1928 record of 98 cases and 35 deaths. During the severe outbreak in 1927 a large proportion of the population was

exposed to the disease and probably developed an immunity to the disease.

Measles.	Whooping Cough
3857 *cases*—77 *deaths.*	1214 *cases*—70 *deaths.*

The above so-called "minor" diseases of children have been responsible for more deaths than Scarlet Fever and Diphtheria combined. Unfortunately the attitude "children might as well have them and get through with them" still prevails in some circles when measles and whooping cough are discussed. Strict isolation technique should be observed.

Mr. Zalizniak, Health Inspector, visited 174 districts, vaccinated 2,129 individuals, immunized 1,024, made 49 special investigations and delivered a number of lectures on public health subjects.

VACCINES AND SERUMS DISTRIBUTED BY THE PROVINCIAL LABORATORY DURING THE YEAR 1929

Smallpox Vaccine		24,460
Diphtheria Antitoxin	1,000 units	2,647
	2,000 "	616
	5,000 "	700
	10,000 "	1,378
Diphtheria Toxoid	12 persons	889
	6 "	755
	1 "	1,215
Schick Test	1–25 persons	78
Scarlet Fever Antitoxin	15 c.c. syringe	287
	15 c.c. vial	401
	2 c.c. syringe	2,603
Scarlet Fever Toxin	6 persons	445
	1 toxin	700
Dick Test	1–10 persons	57
Tetanus	1,500 units	35
Anti–Meningitis	20 c.c. vial	189
Pertussis P.D. & Co.	5 c.c. Bio. 201	6
	20 c.c. Bio. 202	22
Other Serums	25 c.c.	120
Typhoid Vaccine	25 c.c.	168
	50 c.c.	53
B.C.G.	10 c.c.	103
Polio Convalescent Serum	10 c.c.	28

WHOOPING COUGH

1929	Sex		MONTHS												AGES								
	M.	F.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	Not stated	TOTAL
Cities:																							
Drumheller	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	1
Medicine Hat	6	4	—	—	—	1	—	—	—	5	—	1	3	—	2	2	6	—	—	—	—	—	10
Towns and Villages	39	32	—	—	4	—	6	1	16	2	16	19	4	3	15	22	34	—	—	—	—	—	71
Rural Districts	125	118	1	17	4	12	17	18	10	13	46	50	53	2	26	47	147	10	—	—	—	10	243
Totals	170	155	1	17	8	13	23	19	26	21	62	70	60	5	46	72	187	10	—	—	—	10	325

TUBERCULOSIS

Cities:																							
Calgary	25	18	4	3	3	8	—	2	4	5	3	3	4	4	—	3	14	13	7	1	—	5	43
Edmonton	39	26	1	2	9	4	7	7	14	6	8	3	2	2	—	—	3	21	30	5	2	4	65
Lethbridge	7	3	4	—	1	1	1	—	1	1	—	—	—	1	—	—	1	4	3	—	—	2	10
Medicine Hat	1	3	—	1	—	—	1	1	1	—	—	—	—	—	—	1	—	1	1	—	—	1	4
Wetaskiwin	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	1
Towns and Villages	18	17	1	2	4	1	5	5	4	3	—	4	4	2	—	1	5	13	10	3	2	1	35
Rural Districts	26	31	1	3	6	8	5	8	6	4	8	5	2	1	—	2	14	5	22	6	2	6	57
Totals	116	99	11	11	23	22	19	23	30	20	19	15	12	10	—	7	37	57	74	15	5	20	215

DIPHTHERIA

Cities:																							
Calgary	113	135	22	18	28	17	31	22	25	15	24	19	17	10	4	42	131	35	29	6	1	—	248
Edmonton	15	23	6	1	3	2	1	4	7	2	4	3	3	2	—	8	15	9	5	1	—	—	38
Lethbridge	4	3	2	—	—	—	—	—	—	—	—	—	5	—	—	1	3	2	—	—	—	1	7
Medicine Hat	6	21	3	3	1	3	1	1	3	—	1	9	1	1	—	3	9	9	4	2	—	—	27
Red Deer	6	9	—	1	—	5	5	3	—	—	—	—	1	—	—	—	5	5	2	—	—	3	15
Towns and Villages	26	43	7	8	1	3	10	9	2	6	11	2	9	1	—	11	32	16	6	—	—	4	69
Rural Districts	96	22	2	1	2	—	12	11	4	2	3	5	—	6	—	3	27	7	6	3	—	2	48
Totals	266	302	47	39	39	45	71	59	50	42	56	40	52	38	5	84	269	106	62	14	2	26	568

SMALLPOX

Cities:																							
Calgary	1	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	—	1	—	2
Drumheller	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Edmonton	4	3	—	—	—	—	—	—	—	—	—	2	4	1	—	2	1	1	3	—	—	—	7
Lethbridge	2	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	2
Towns and Villages	18	8	2	1	5	6	—	—	—	1	4	—	—	7	1	—	9	5	5	5	—	1	26
Rural Districts	35	21	1	1	9	4	1	13	—	1	—	3	9	14	1	5	22	10	8	7	—	3	56
Totals	61	33	3	3	14	12	1	13	1	3	4	5	13	22	2	7	32	18	18	12	1	4	94

CHICKENPOX

Cities:																							
Drumheller	2	4	2	1	—	2	1	—	—	—	—	—	—	—	—	—	4	—	1	—	—	1	6
Lethbridge	83	81	16	7	25	30	35	20	13	1	8	4	2	3	2	18	141	2	1	—	—	—	164
Wetaskiwin	7	16	2	1	—	1	—	3	13	—	2	—	—	1	3	3	14	3	—	—	—	—	23
Towns and Villages	114	137	20	21	11	24	13	13	11	10	16	52	26	34	5	40	179	13	6	—	—	8	251
Rural Districts	157	154	37	7	6	25	27	15	18	16	14	58	47	41	13	35	223	29	6	—	—	5	311
Totals	363	392	77	37	42	82	76	51	55	27	40	114	75	79	23	96	561	47	14	—	—	14	755

MUMPS

Cities:																							
Drumheller	2	1	—	—	—	2	1	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	3
Lethbridge	1	3	—	—	—	3	—	1	—	—	—	—	—	—	—	—	—	2	2	—	—	—	4
Medicine Hat	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	—	3
Wetaskiwin	8	4	—	—	—	2	—	—	1	—	—	2	7	—	1	1	6	3	1	—	—	—	12
Towns and Villages	175	182	28	48	45	87	75	30	7	14	—	3	3	17	1	37	231	74	19	4	—	1	357
Rural Districts	145	133	39	33	18	36	13	43	4	11	4	18	21	38	2	13	151	72	23	5	1	11	278
Totals	332	325	70	81	63	130	89	74	12	25	4	23	31	55	4	42	392	151	46	9	1	12	657

ANTERIOR POLIOMYELITIS

Cities:																							
Calgary	2	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	2	—	—	—	—	—	2
Edmonton	1	1	—	—	—	—	—	—	—	1	—	1	—	—	—	—	2	—	—	—	—	—	2
Lethbridge	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Towns and Villages	5	9	—	1	1	—	2	—	—	1	3	4	1	1	1	4	7	1	—	—	—	1	14
Rural Districts	6	4	—	—	—	—	1	1	—	—	—	5	2	1	—	2	6	1	1	—	—	—	10
Totals	14	15	1	1	1	—	3	1	—	3	4	10	3	2	1	7	17	2	1	—	—	1	29

TYPHOID FEVER

1929	Sex		MONTHS												AGES									
	M.	F.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	Not stated	TOTAL
Cities:																							
Calgary	9	3	—	—	—	—	1	1	3	—	5	2	—	—	—	1	6	2	1	1	—	1	12
Drumheller	1	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—	2
Edmonton	—	2	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	2	—	—	—	—	2
Lethbridge	6	9	1	1	—	1	3	—	—	1	3	1	2	2	—	—	3	7	4	1	—	—	15
Medicine Hat	1	1	—	—	—	—	—	—	—	—	—	2	—	—	—	—	1	—	1	—	—	—	2
Towns and Villages	17	15	—	7	11	2	1	—	—	3	5	1	2	—	—	1	11	10	10	—	—	—	32
Rural Districts	36	13	1	9	—	4	4	10	—	3	9	3	6	—	—	2	10	13	22	2	—	—	49
Totals	70	44	2	17	11	7	9	11	3	7	25	10	10	2	—	4	31	34	39	5	—	1	114

MEASLES

Cities:																							
Drumheller	2	3	—	2	2	1	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	5
Lethbridge	18	14	1	3	—	1	2	17	3	3	1	1	—	—	1	5	24	2	—	—	—	—	32
Medicine Hat	1	3	1	—	—	2	1	—	—	—	—	—	—	—	—	1	2	—	1	—	—	—	4
Red Deer	—	2	—	—	—	2	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	2
Wetaskiwin	20	16	24	8	—	3	1	—	—	—	—	—	—	—	—	4	28	3	1	—	—	—	36
Towns and Villages	344	381	208	172	72	108	113	30	8	5	3	1	1	4	11	147	473	69	23	2	—	—	725
Rural Districts	714	680	271	122	176	263	232	199	70	23	11	1	12	14	28	222	835	196	42	4	2	65	1394
Totals	1099	1099	505	307	250	380	349	246	81	31	15	3	13	18	40	380	1368	270	67	6	2	65	2198

GERMAN MEASLES

Cities:																							
Lethbridge	10	18	3	2	4	2	7	5	4	—	—	—	—	1	—	1	20	5	2	—	—	—	28
Towns and Villages	7	17	—	1	8	2	5	2	2	1	—	1	2	—	2	2	13	6	1	—	—	—	24
Rural Districts	23	21	2	33	1	1	2	3	2	—	—	—	—	—	1	3	23	13	4	—	—	—	44
Totals	40	56	5	36	13	5	14	10	8	1	—	1	2	1	3	6	56	24	7	—	—	—	96

SCARLET FEVER

Cities:																							
Calgary	222	289	91	48	57	67	37	32	22	12	17	34	41	53	1	66	288	93	56	7	—	—	511
Edmonton	155	204	41	22	33	31	51	55	16	18	14	23	33	22	1	39	188	97	31	3	—	—	359
Drumheller	11	5	6	3	—	1	1	2	2	—	1	—	—	—	—	1	8	3	4	—	—	—	16
Lethbridge	77	72	6	3	4	9	6	2	1	1	15	27	32	43	2	23	101	14	9	—	—	—	149
Medicine Hat	6	17	2	9	3	1	2	4	1	—	—	—	1	—	—	5	6	9	3	—	—	—	23
Wetaskiwin	1	1	—	—	—	—	1	—	—	—	—	—	—	1	—	—	1	1	—	—	—	—	2
Towns and Villages	114	111	31	42	25	21	27	18	6	7	10	12	12	14	3	31	117	45	16	—	—	13	225
Rural Districts	213	233	47	43	51	38	51	31	23	22	13	54	52	21	4	72	242	63	35	2	—	28	446
Totals	799	932	224	170	173	168	176	144	71	60	70	150	171	154	11	237	951	325	154	12	—	41	1731

CEREBRO-SPINAL MENINGITIS

Cities:																							
Calgary	2	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	2
Edmonton	5	4	1	4	1	1	—	—	—	—	1	1	—	—	—	—	3	3	1	2	—	—	9
Lethbridge	1	1	—	—	—	—	1	—	—	—	—	—	1	—	—	—	1	—	—	1	—	—	2
Medicine Hat	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Red Deer	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Towns and Villages	9	3	1	—	2	3	1	2	—	—	—	—	3	—	—	2	4	2	1	1	—	2	12
Rural Districts	10	12	1	—	3	7	3	2	1	1	1	1	1	1	4	7	2	—	—	—	—	2	22
Totals	20	29	4	5	6	13	5	4	1	1	2	2	5	1	4	9	15	11	2	4	—	4	49

ERYSIPELAS

1929	Sex		MONTHS												AGES								TOTAL
	M.	F.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44	45-59	60-69	Not stated	
Cities:																							
Calgary	16	8	11	1	6	2	—	3	—	—	—	—	1	—	—	—	—	1	12	8	2	1	24
Drumheller	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Edmonton	32	24	5	5	3	11	5	6	4	1	4	5	3	4	3	1	2	5	17	14	7	7	56
Lethbridge	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	1
Towns and Villages	13	9	3	—	1	3	3	3	4	1	1	—	2	1	1	—	—	2	10	5	3	1	22
Rural Districts	12	10	3	4	1	2	2	1	1	1	3	—	2	1	2	—	—	2	10	3	1	4	22
Totals	74	52	22	10	11	19	10	14	9	3	8	5	8	7	6	1	2	10	50	31	13	13	126

ENCEPHALITIS LETHARGICA

Cities:																							
Calgary	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Edmonton	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Totals	1	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	2

PARATYPHOID FEVER

Cities:																							
Calgary	2	1	—	—	—	—	—	1	—	—	1	1	—	—	—	1	—	1	—	1	—	—	3
Edmonton	2	1	—	—	—	—	—	1	—	—	—	2	—	—	—	—	3	—	—	—	—	—	3
Towns and Villages	4	25	—	—	—	1	2	—	26	—	—	—	—	—	—	—	1	16	10	1	—	1	29
Rural Districts	2	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	1	—	1	—	—	—	2
Totals	10	27	—	—	—	1	2	4	26	—	1	3	—	—	—	1	5	17	11	2	—	1	37

Public Health Education Division

(F. T. Cook, *Lecturer*)

The work begun in April of 1928 was continued during 1929 on a much larger scale. The demand for health education of a general nature steadily grew, and requests for literature, general and specific information, exhibits, pictures, articles and lectures greatly increased.

With the development of the Department as a whole, the need for a central information bureau has become more apparent. To meet this growing need, information files on a great many subjects have been created, which are available to the heads of the various branches, for both their own information and that of the general public. Material is assembled from every available source, including the medical literature, bulletins, magazines and the daily press.

A system of assembling statistics in chart form was also begun which gives accurate information, at a glance, on important subjects, such as birth and death rates from various causes, and the progress of certain types of work. As hitherto very little had been done in this respect, this simplified information has proven to be very valuable to the heads of the branches concerned.

The lecture service has steadily grown, and in a few instances has assumed regular form, such as in the normal and agricultural schools and a few junior colleges which are visited every year. At the schools of agriculture particularly, an effort is made to present the work of public health in a way that will enlist the students in the army of health workers. From these schools approximately 250 students are graduated each year, and for the most part return to the rural areas to assume positions of leadership in their communities. If they return with a thorough public health point of view they will, in time, become a formidable force for public health enterprises.

The general lecture work has also been carried on during the year; 162 lectures were given in 106 different places to 15,919 people. The subjects of the lectures included: The control of Communicable Diseases, Sanitation, Child Welfare, Social Hygiene, and special features of the work of the Department. Moving pictures were shown at practically all meetings, featuring the general work of public health. Itineraries included the following districts: Cardston, Claresholm, Calgary, Irricana, Taber, Didsbury, Olds, Donalda, Edmonton, Hardisty, Viking, Two Hills, Irma, Duchess, Lomond, Arrowwood, Lethbridge, Barons, Vulcan, Camrose, Lacombe, Onoway, Vermilion, Wabamun, Smoky Lake, Edgerton.

Hospital Inspection Branch

And

Coroner's Supervision of Operations

(E. A. Braithwaite, M.D. L.M.C.C., *Inspector of Hospitals*)

During the year I inspected all the approved hospitals in the Province.

The total number of operations, taken from the weekly hospital operation reports, was 23,050, and the number of deaths following operations, 732.

The following is a list of the operations performed and deaths which occurred in the approved, municipal and private hospitals during the year 1929:

	Approved H.	Deaths	Munic. H.	Deaths	Private H.	Deaths
Abscess	800	9	107	4	11	0
Abortion	166	9	95	3	13	0
Actiomycosis	80	0	107	1	11	0
Accidents, no operations shown	0	10	0	2	0	1
Adenitis	0	0	2	0	0	0
Adenoidectomy	178	0	12	0	5	0
Adhesions	153	0	11	0	0	0
Amputation	146	0	14	0	2	0
Appendectomy	3357	125	893	42	33	0
Arthritis (Septic)	0	0	1	1	0	0
Aspirate	0	0	9	2	0	0
Aspirate Pericarditis	1	1	0	0	0	0
Bone Removed	0	0	6	0	0	0
Bowel Obstruction	0	0	40	29	0	0
Breast Amputation	1	1	0	0	0	0
Bullet Wound	0	0	2	0	0	0
Burns	0	0	3	3	0	0
Bursitis	0	0	2	0	0	0
Bunions	0	0	1	0	0	0
Cancer	42	96	12	10	0	0
Caesarian Section	38	8	1	1	0	0
Carbuncle	17	1	3	0	0	0
Cataract	52	0	0	0	0	0
Cauterization	51	0	3	0	0	0
Cellulitis	17	8	0	0	0	0
Cervix Operations	64	0	11	0	0	0
Cholelithiasis	19	1	5	0	0	0
Cholecystectomy	379	0	38	2	1	0
Cirrhosis of Liver	0	0	1	1	0	0
Circumcision	340	0	68	0	5	0
Cleft Palate	20	1	2	0	0	0
Colitis	0	0	1	1	0	0
Caepexy	0	0	0	0	2	0
Colostomy	17	0	0	0	0	0
Colporrhaphy	17	0	1	0	0	0
Corns	1	0	1	0	0	0
Curret Uterus	71	0	95	0	0	0
Curret and Dilate	239	0	12	0	5	0
Cysts	50	3	23	0	1	1
Cystic Ovary	10	0	27	0	0	0
Cystoscopy	222	0	2	0	2	0
Cystitis	0	0	1	0	0	0
Cystocele	1	0	1	0	0	0
Cystotomy	18	13	4	2	0	0
Decompression of skull	0	1	0	0	0	0
Diabetic Coma (Prolapse)	0	0	0	0	0	0
Dislocations	33	0	7	0	0	0
Dilatation	68	0	6	0	0	0
Ectopic	4	1	3	3	0	0

	Approved H.	Deaths	Munic. H.	Deaths	Private H.	Deaths
Empyema	35	29	12	10	0	0
Enterostomy	0	0	2	0	0	0
Endocarditis	0	0	1	1	0	0
Enucleate Eye	58	0	0	0	0	0
Endometritis	0	0	9	0	0	0
Examination	51	0	9	0	1	0
Excise	1	0	0	0	0	0
Foreign Body	48	1	119	0	0	0
Fibroid	18	0	0	0	0	0
Fistula	17	2	10	0	0	0
Fistula in Ano	1	0	0	0	0	0
Fracture	470	23	0	0	0	0
Furuncle	0	0	1	0	0	0
Gastro–Enterostomy	88	6	10	0	0	0
Gastrectomy	1	0	2	0	0	0
Glands Removed	51	1	10	0	1	0
Glaucoma	0	0	1	0	0	0
Growth	0	0	75	0	0	0
Gunshot Wounds	0	0	7	5	0	0
Gangrene	0	0	5	0	0	0
Haemorrhage	17	2	7	5	0	0
Haemorrhoids	137	0	19	0	2	0
Hare Lip	2	0	3	0	0	0
Hernia	519	24	96	2	5	0
Hymen Imperforate	1	0	0	0	0	0
Hydrocele	36	0	8	0	1	0
Hysterectomy	143	17	20	0	2	0
Incision and Drainage	170	0	31	0	1	0
Infections	68	0	15	0	1	0
Injection	17	1	1	0	0	0
Imperforate Anus	1	1	0	0	0	0
Intestinal Obstruction	1	0	5	0	1	0
Intussusception	0	0	3	3	1	0
Iredectomy	51	0	0	0	0	0
Ischiorectal Abscess	0	0	5	0	0	0
Jejunostomy	1	1	0	0	0	0
Kidney Suspension	0	0	1	0	0	0
Lacerations	90	1	34	0	0	0
Laparotomy	69	7	32	2	2	0
Ligation	2	0	0	0	0	0
Lipoma	17	0	5	0	0	0
Lithotomy	0	0	1	1	0	0
Lumbar Puncture for Meningitis (no operations shown)	0	0	0	5	0	0
Mastoid	308	15	17	0	12	0
Manipulation	17	0	2	0	0	0
Mastitis	0	0	1	1	0	0
Mole	1	0	0	0	0	0
Meningitis	0	0	5	5	0	0
Necrosis	0	0	2	0	0	0
Nephrotomy	17	1	2	0	0	0
Oesophagus Stricture	0	0	1	0	0	0
Osteomyelitis	68	9	7	0	0	0
Osteotomy	1	0	0	0	0	0
Otitis Media	17	0	5	0	0	0
Ovariotomy	10	0	13	0	0	0
Ovarian Resection	1	0	0	0	0	0
Ovary Removal	6	0	0	0	0	0
Oophorectomy	260	0	0	0	0	0
Paracentesis	34	0	10	0	0	0
Perineorrhaphy	94	0	14	0	1	0
Peritonitis	8	1	7	3	1	0
Plastic	17	0	0	0	0	0
Phlebotomy	3	1	0	0	0	0
Plaster of Paris Cast	188	0	15	0	0	0
Polypus	70	10	2	0	1	0
Pneumothorax	4	1	0	0	0	0
Prostatectomy	51	21	13	0	0	0
Prostascopy	1	0	4	0	0	0
Pyorrhea	527	2	159	0	13	0
Pyelitis	0	0	1	0	0	0
Pterygium	17	0	0	0	0	0
Radium Treatment	68	0	0	0	0	0
Rectocele	1	0	0	0	0	0
Resect Rib	102	0	21	0	1	0
Repair	33	0	0	0	1	0
Resect Bowel	7	2	0	0	0	0
Removal	20	0	11	0	0	0
Retroversion	5	0	0	0	1	0
Salpingectomy	220	4	10	0	0	0
Scar Removed	17	0	2	0	0	0
Sequestrotomy	17	0	4	0	1	0
Septicaemia	43	10	8	0	0	0
Shorten Round Ligament	18	0	2	0	0	0
Sigmoidoscope	1	0	1	0	0	0

	Approved H.	Deaths	Munic. H.	Deaths	Private H.	Deaths
Sinus	51	1	1	0	1	0
Skin–graft	34	0	3	0	0	0
Sterility	0	0	3	0	0	0
Submucous Resection	104	0	1	0	0	0
Suture	270	0	61	0	0	0
Suspension	0	0	9	0	0	0
Transfusion	34	2	1	0	0	0
Testicle	4	2	2	0	0	0
Tetanus Nail in Hand	1	1	0	0	0	0
Toe Nails	34	0	11	0	0	0
Thyroidectomy	235	13	13	0	0	0
Tonsillectomy	3454	4	697	0	93	0
Tonsils and Adenoids	2695	2	959	0	106	0
Trachelorrhaphy	52	1	2	0	0	0
Tracheotomy	4	0	0	0	0	0
Tuberculosis	0	0	0	0	1	1
Tumour	77	3	26	0	1	0
Turbinectomy	35	0	0	0	1	0
Ulcer	34	26	12	7	0	0
Urethral Stricture	0	0	1	0	0	0
Urethrotomy	0	0	1	1	0	0
Urethra (ruptured)	0	0	1	1	0	0
Uterus (fibroid)	1	0	0	0	0	0
Uterus Suspension	6	0	12	0	0	0
Ventral Suspension	85	0	15	0	0	0
Wounds	51	0	21	0	0	0
Varicose Veins	17	0	7	0	1	0
Venesection	0	0	6	0	0	0

NOTE.—Deaths from cancer are in excess of cases reported, because some cases were not diagnosed as cancer until after pathological examination. In other cases patients were operated on outside the Province and could not be shown as operative cases, but evidently went to hospitals in the Province for final attention.

In addition to the operations classified above the following operations were performed by the Travelling Clinic:

T. & A.	1,405
Circumcision	97
Other minor operations	150

No deaths.

Total number of operations in hospital	2,315
Total number of deaths	689
Percentage	2.97

Director of the Provincial Laboratory

(Allan C. Rankin, C.M.G., M.D., D.P.H., *Provincial Bacteriologist.*)

The total number of examinations for the year was 40,673, an increase of 619 specimens. Co-operation with the University departments has continued and the work of the laboratory has thereby been much facilitated. The chemical examination of water and of milk has been carried out by the provincial analyst.

The details given below show the nature and number of the examinations performed during the year:

		Total
Communicable Diseases:		
Sputum	758	
Diphtheria	1,669	
Typhoid Fever	370	
		2,797
Waters		1,716
Milks		1,076
Mothers' Milk		28
Miscellaneous Examinations		2,191
Urinalysis		532
Medico–Legal Examinations		13
Bloods for the Wassermann Test		12,506
Smears for the Gonococcus		2,905
Icterus Index Determination		652
Van Den Bergh Determination		2,886
Post-Mortem Examinations		121
Pathological Histological Material		5,591
Chicken Blood Examinations, B.W.D. Agglutinating Tests		7,066
Cattle Blood Examinations		714
Typhoid Vaccine Distributed (25 c.c. quantities)		274
Autogenous Vaccines Distributed (25 c.c. quantities)		120
B.C.G. Vaccine Distributed (10 c.c. quantities)		103
Poliomyelitis Serum Distributed (10 c.c. quantities)		28
Number of specimens examined (not including Post Mortems or Vaccines distributed)		40,673
Water and Milk containers prepared and distributed		1,405
Special and Blood containers prepared and Distributed		20,986

There were 1,716 samples of water examined bacteriologically, bacteriologically and chemically, and chemically, an increase of 126 samples; 1,405 water and milk containers were prepared and distributed during the year, and 20,986 blood and special containers prepared and distributed.

Milks.—1,076 samples of milk were examined bacteriologically, bacteriologically and chemically, and chemically, an increase of 40 samples.

Miscellaneous Examinations.—There were 2,191 miscellaneous examinations made during the year, an increase of 391 specimens, and also 532 urinalyses performed.

Medico-Legal Examinations.—This work has included various examinations pertaining to criminal and other cases in the Province throughout the year.

Bloods for the Wassermann Test.—12,704 blood specimens for the Wassermann Test were received during the year; 198 of these

specimens were unsuitable for the test. Out of the 12,506 blood specimens examined 1,838 proved positive. Of the bloods examined 3,801 were received from Calgary and the south of the Province, and 8,705 bloods were received from north of Calgary and north of the Province.

Smears for the Gonococcus.—There were 2,905 examinations made during the period covered by this report, an increase of 250 specimens.

Pathological Histological Material.—During the year 5,591 specimens were examined. This work is under the direction of Dr. J. J. Ower.

Chicken Blood Examinations.—There were 7,066 chicken blood examinations made for the diagnosis of bacilliary white diarrhoea.

Cattle Blood Examinations.—714 cattle bloods were examined for the diagnosis of contagious abortion.

Vaccines, etc., Prepared and Distributed.—9,510 cubic centimeters of vaccine were prepared. This includes typhoid vaccine, autogenous vaccines and B.C.G. vaccine; 280 cubic centimeters of poliomyelitis convalescent serum were also prepared and distributed.

Research Work.—The work in tuberculosis research has progressed.

Convalescent Poliomyelitis Serum.—In co-operation with the Department of Health and Doctors Mewburn, Huckell and McGugan it has been possible for the laboratory to prepare enough convalescent poliomyelitis serum to meet the demands in connection with the cases reported during the time under consideration.

ESTIMATED COMMERCIAL VALUE OF WORK IF MINIMUM CHARGE WERE MADE

Sputum	$ 2.00	758	$ 1,516.00
Diphtheria	2.00	1,669	3,338.00
Typhoid Fever	2.00	370	740.00
Waters	15.00	1,716	25,740.00
Milks	5.00	1,076	5,380.00
Mothers' Milk	2.00	28	56.00
Miscellaneous Examinations	2.00	2,191	4,382.00
Urinalysis	2.00	532	1,064.00
Medico-Legal Examinations	5.00	13	65.00
Bloods for the Wassermann Test	5.00	12,506	62,530.00
Smears for the Gonococcus	2.00	2,905	5,810.00
Icterus Index Determination	1.00	652	652.00
Van Den Bergh Determination	1.00	2,886	2,886.00
Pathological Histological Material	5.00	5,591	27,955.00
Chicken Blood Examinations, B.W.D. Agglutinating Tests	.10	7,066	706.60
Typhoid Vaccine (25 c.c. quantities)	1.00	274	274.00
Autogenous Vaccines (25 c.c. quantities)	15.00	120	1,800.00
B.C.G. Vaccine (10 c.c. quantities)	3.00	103	309.00
Poliomyelitis Serum (10 c.c. quantities)	5.00	28	140.00
Cattle Blood Examinations	.20	714	142.80
Total		40,673	$145,486.40

Provincial Sanitary Engineer

(R. B. Owens, B.A., B.E., *Provincial Sanitary Engineer.*)

The following is a detailed list of works for which Provincial Board of Health Certificates have been issued, together with the estimated cost of each:

WATERWORKS

Calgary—Certificate No. 265–29, Water connection. Estimated Cost	$ 15,000.00
Edmonton—Certificate No. 266–29, Improvements to Water System. Estimated Cost	66,735.00
Magrath—Certificate No. 268–29, System of Waterworks. Estimated Cost	.....
Drumheller—Certificate No. 264–29, Extensions to Waterworks System. Estimated Cost	24,930.00
Edmonton—Certificate No. 273–29, Extensions to Waterworks. Estimated Cost	4,234.00
Camrose—Certificate No. 277–29, Additions to Waterworks System. Estimated Cost	.....
Vegreville—Certificate No. 290–29, Extensions to Waterworks. Estimated Cost	4,800.00
Coronation—Certificate No. 291–29, Extensions to Waterworks. Estimated Cost	37,305.00
Edmonton—Certificate No. 292–29, Extensions to Waterworks. Estimated Cost	24,031.00
Coleman—Certificate No. 293–29, Construction of Waterworks. Estimated Cost	620.00
Lacombe—Certificate No. 295–29, Construction of Waterworks System. Estimated Cost	80,600.00
Wainwright—Certificate No. 299–29, System of Waterworks. Estimated Cost	16,000.00
Calgary—Certificate No. 300–29, System of Waterworks. Estimated Cost	3,770,000.00
Calgary—Certificate No. 301–29, Water connections. Estimated Cost	22,500.00
Calgary—Certificate No. 303–29, System of Waterworks. Estimated Cost	175,000.00
Coleman—Certificate No. 307–29, System of Waterworks. Estimated Cost	10,015.00

SEWERAGE

Calgary—Certificate No. 265–29, Sewer connections. Estimated Cost	15,000.00
Magrath—Certificate No. 268–29, Sewerage and Sewage Disposal. Estimated Cost	.....
Edmonton—Certificate No. 269–29, Sewer Construction. Estimated Cost	75,740.00
Stettler—Certificate No. 270–29, Sewerage and Sewage Disposal. Estimated Cost	73,140.00
Edmonton—Certificate No. 271–29, Sewer Construction. Estimated Cost	191,000.00
Edmonton—Certificate No. 272–29, Sewer Construction. Estimated Cost	13,850.00
Calgary—Certificate No. 274–29, Relief and Storm Sewers. Estimated Cost	380,070.00
High River—Certificate No. 275–29, Sewer Extensions. Estimated Cost	950.00
Calgary—Certificate No. 276–29, Sewer Extensions. Estimated Cost	45,096.85
Gleichen—Certificate No. 278–29, Sewer Construction. Estimated Cost	5,974.39
Gleichen—Certificate No. 279–29, Sewage Disposal Plant. Estimated Cost	3,580.00
Lacombe—Certificate No. 294–29, Sewerage and Sewage Disposal Plant. Estimated Cost	62,880.00
Edmonton—Certificate No. 296–29, Storm Sewers. Estimated Cost	110,000.00
Edmonton—Certificate No. 297–29, Sewage Disposal Plant. Estimated Cost	35,000.00
Calgary—Certificate No. 298–29, Sewer and Septic Tank, construction. Estimated Cost	4,324.00
Calgary—Certificate No. 302–29, Sewage Disposal System. Estimated Cost	250,000.00
Calgary—Certificate No. 301–29, Sewer connections. Estimated Cost	22,500.00
Calgary—Certificate No. 304–29, Site for Sewage Disposal Plant. Estimated Cost	.....
Edmonton—Certificate No. 306–29, Sewer Construction. Estimated Cost	87,600.00
Calgary—Certificate No. 305–29, Sewer Extension. Estimated Cost	44,870.22
Lethbridge—Certificate No. 308–29, Sanitary Sewer. Estimated Cost	7,500.00

Plans and specifications submitted to the Provincial Board of Health for waterworks, sewerage and sewage disposal plants as required under sections 10, 11, 12, 13, 14 and 15 of The Public Health Act, were duly examined, and where approval was given certificates were issued.

Plans and specifications other than those aforesaid, but required by the Provincial Board of Health, were also examined, and the necessary action taken thereon.

Plans, specifications and proposals in connection with the sanitary engineering works submitted to the Public Utilities Commission were also examined and advice given.

Plans and specifications in connection with sanitary engineering works connected with hospitals under The Hospitals Act and Private Hospitals Act were examined and advice given thereon.

Sanitary engineering works in connection with the institutions under the administration of the Public Works Department were visited and advice given where necessary.

During the year reports on the analyses of water and ice were examined and, where necessary, action in the matter of prohibiting the use of the supply was taken, or an investigation made for the purpose of advising as to a remedy.

Under the sanitation section of the sanitary engineering branch of the Department, the following work was carried out by our three inspectors:

One hundred and ninety-three health districts were visited and inspected. Of this number one hundred and twenty-four were visited and inspected a second time.

One hundred and fourteen lumber, tie, sawmill and mining camps were visited and inspected. Of this number seventy-six were inspected a second time.

One hundred and fifty-eight notices to abate nuisance were issued and served by the inspectors, and sixty were ordered issued by representatives of the local health authorities.

Thirteen prosecutions were carried out, and convictions were obtained in each case, fines varying from $5 to $20 being imposed in addition to costs.

Fifty-six samples of water were collected for examinations and analyses.

Twenty-five waterworks and sewage disposal systems were inspected.

Seven hundred and eighty-eight pounds of meat and eight pounds of sausage were seized and destroyed as unfit for food for human consumption.

Ninety-four complaints and requests for services of inspectors were received and satisfactory adjustments were made in each case. Requests for inspectors were to assist in locating suitable locations for nuisance grounds, hospital sites, stockyards, etc., and for further inspections of the district.

The services of the inspectors have been used in investigations of outbreaks of infectious and contagious disease.

In addition to the above, one inspector has been on part time dealing with office routine with respect to the new system of supervision of purchasing adopted by the Department at the end of the year 1927.

Plans dealing with sewage disposal, heating and ventilation have been prepared, printed and distributed. These are available to those who request information on these subjects.

Special visits have been made to the Ghost River hydro-electric construction camps, also to the Turner Valley oil field with respect to sanitary conditions of the camps and townsites.

The usual arrangements were made for the Provincial health exhibit of occupational therapy work carried on in Provincial institutions and for the emergency hospital which the Department operates for the Edmonton Exhibition Association. In connection with the foregoing, the services of one inspector are utilized to erect and supervise exhibits.

Public Health Nursing Branch

(K. S. Brighty, R.N., *Acting Superintendent*)

Three public health nurses have conducted a generalized programme of public health nursing in the following districts in the Province, viz.: Municipal District of Marquis, Municipal District of Norma and Town of Vegreville, and Municipal District of Richdale.

This service has been ably supported in the districts in which it functions. The following is a report of work done by the three nurses:

First inspection	1793	Number with defects	1885
Second inspection	1276	Number without defects	1184
Classroom inspections	85	Number of vaccinations	113
Number not vaccinated	1270	Number diphtheria toxoid treatments	429

SUSPECT DEFECTIVE CONDITIONS

Vision	361	Tonsils	846
Hearing	45	Teeth	1223
Adenoids	4345	Posture	24

SYMPTOMS NOTED

Enlarged glands	282	Other eye diseases	17
Skin diseases	47	Mental defective	3
Other skin conditions	19	Nervous symptoms	14
Malnutrition	235	Pediculosis	33
Orthopaedic	4	Communicable or infectious disease	78

RESULTS OBTAINED

Glasses fitted	78	Home visits	220
Glasses refitted	48	Interviews	50
Tonsils removed	58	Child Welfare Clinics	3
Adenoids removed	54	Attendance	83
Dental treatment	173	Public lectures	6
Medical treatment	58	Little Mothers' League	7
Schoolroom talks	65	Attendance	168

VISITING NURSE—ONE MUNICIPALITY

Number of calls made	270	Number of medical cases	95
Number of consultations	95	Number of surgical cases	36
Number of treatments	168	Number of obstetrical cases	6

Local Clinic—20 cases of tonsils and adenoids removed.
Dental work on same day, 2 cases.
Little Mothers' League Classes, 12.
Boys' First Aid Classes, 6.

District Nursing

During the year a new district was opened at Valley View, eighty miles east of Grande Prairie. This district is rapidly being settled by Scandinavians, and the service is greatly needed. The nurse is temporarily living in a small one-roomed shack.

Owing to the extensive territory of over ninety miles, and poor facilities for travel, a division of the Slave Lake District was made, thus creating an additional district at Kinuso.

Six districts are served by nurses.

District Physicians

The appointment of three British women physicians was made in June. The new district created at Kinuso, and two centres

hitherto served by district nurses, namely, Notikewin and Lac La Biche, are now served by the three women physicians.

Statistical Report

DISTRICT PHYSICIANS (6 months)

Number of calls made	740	Number of medical cases	290
Number of consultations	495	Number of surgical cases	179
Number of deaths	5	Number of obstetrical cases	27
Number of treatments	215		

DISTRICT NURSES

Number of calls made	2325	Number of medical cases	1530
Number of consultations	1282	Number of surgical cases	368
Number of deaths	21	Number of obstetrical cases	80
Number of treatments	1161		

Child Welfare Clinics

The child welfare clinics in Edmonton, Calgary and Medicine Hat have been directed as usual by a Provincial public health nurse. It is very encouraging to note that many young mothers of foreign birth, especially Ukrainian, are attending these clinics.

Statistical Report

EDMONTON CHILD WELFARE CLINIC

Total number in attendance at the Clinic	4620
Total number of babies in attendance	3941
Total number of pre–school children in attendance	679
Total number of clinics held	99
Average attendance	48
Number of babies on the roll	1515
Number of new babies admitted	711
Number of babies re–admitted	8
Number of pre–chool children on roll	574
Number of pre–school children admitted	174
Number of pre–school children re–admitted	25
Number of babies transferred to pre–school clinic	133
Number of babies discharged	694
Number of pre–school children discharged	502
Number of nurses' visits	4623
Number of out–of–town cases in attendance	87
Number of babies referred to family doctor	61
Number of pre–school children referred to doctor	28
Number of deaths of babies under one year of age	16
Number of deaths of babies in second year	2
Number of deaths of pre–school children	3

DEFECTS FOUND IN BABIES

Malnutrition	8	Cleft Palate	1
Rickets	27	Congenital idiocy	1
Intestinal indigestion	70	Cretin	2
Thrush	14	Mongolian idiot	6
Intertrigo	38	Congenital malformation	2
Stomatitis	3	Hematoma	2
Eczema	81	Club foot	1
Impetigo	16	Epigastric hernia	1
Scabies	6	Anerexia	3
Furunculosis	2	Pylorospasm	2
Miliaria	45	Morycism	1
Seborrhoea	3	Celiac disease	1
Birthmarks	6	Jaundice	2
Acrodynia	2	Bronchitis	10
Scurvy	1	Acute broncho–pneumonia	1
Umbilical hernia	65	Congenital heart disease	5
Inguinal hernia	15	Frost bites	2
Infected umbilicus	7	Granduloma	1
Phimosis	85	Insect bites	1
Hydrocele	3	Felon	1
Urethral ulcer	1	Prolapse of rectum	1
Conjunctivitis	18	Fracture of clavicle	1
Granulated eyelids	2	Wry neck	1
Styes	1	Secondary anaemia	7
Corneal abscess	1	Asthma	1
Otitis media	23	Abscess	1
Enlarged tonsils	3	Burns	8
Enlarged adenoids	1	Mustard burns	1
Enlarged glands	1	General sacromatatis	1
Strabismus	8	Infected finger	2
Mastitis	3	Worms	3
Geographical tongue	3	Vaginal discharge	1
Hypertonic	1	Sprained shoulder	1
Tongue–tied	8		

DEFECTS FOUND IN PRE-SCHOOL CHILDREN

Malnutrition	2	Phimosis	12
Rickets	7	Anorexia	8
Intestinal indigestion	3	Abdominal abscess	1
Intertrigo	1	Conjunctivitis	1
Stomatitis	7	Granular eyelids	1
Congenital heart	1	Styes	2
Impetigo	14	Strabismus	5
Eczema	6	Otitis media	14
Scabies	9	Enlarged tonsils	81
Psoriasis	1	Enlarged adenoids	76
Adenitis	1	Enlarged glands	39
Geographical tongue	3	Acute tonsilitis	3
Septic throat	1	Curvature of spine	1
T.B. glands	1	Dislocated hip	1
Carious teeth	14	Pyelitis	1
Umbilical hernia	1	Multiple contusions	1
Inguinal hernia	2	Worms	3
Enuresis	5	Burns	1
Mongolian idiot	2	Mental deficiency	3
Hemiplegia	1	Secondary dementia	1
Bronchitis	7		

Forty-nine pre-natal cases were enrolled and eight layettes supplied to needy mothers.

Our thanks are due the Victorian Order of Nurses, the Keomi Club and the Civic Relief Department for their splendid co-operation. Also the clinic doctors—Dr. Folinsbee, Dr. Leitch and Dr. Mildred Newell—for the excellent services they have so cheerfully rendered during the year.

Medical students have been in attendance at all the Friday clinics held during the academic year. Nurses from both the Royal Alexandra and the University Hospitals have been in attendance at both clinics each week.

Thirty-four letters regarding infant feedings have been sent out from the office to rural districts in reply to enquiries from anxious mothers.

Calgary Child Welfare Clinic

Clinics were held in three rooms in the health department, open three afternoons a week with nurses only in attendance and two afternoons with doctor and nurses. Staff: One doctor, two nurses, and one nurse-in-training from the General Hospital two afternoons a week.

Total number of clinics held	102
Highest attendance	93
Lowest attendance	9
Average attendance	54
Total attendance since clinic started—Nov., 1922	33,513
Total attendance for 1929	5520
Number on roll, Jan. 1, 1930	1760
Total number of visits during year	2153
Number of cases examined by doctor (infants)	2030
Number of cases examined by doctor (pre-school)	321
New cases admitted during year (infants)	562
New cases admitted during year (pre-school)	139
Re-admitted after being discharged	38
Number transferred from infant to pre-school	411
Number of cases discharged (infants)	137
Number of cases discharged (pre-school)	402
Died	6
School	198
Left city	111
Lost	89
Non-attendance	173

INFECTIOUS DISEASES

Found at Clinic:		Found in Homes:	
Chickenpox	2	Chickenpox	2
Mumps	1	Measles	3
Nasal diphtheria	1	Pediculosis	1
Pediculosis	1		

Mental defective suspects 2

Feeding Cases:

Breast	1309	Mixed	467
Bottle	1560	Others	1151

DEFECTS FOUND

	Infant.	Pre-school.		Infant.	Pre-school.
Malnutrition	49	19	Impetigo	10	7
Congenital malformation	8	2	Intertrigo	3	..
Eyes	21	23	Furunculosis	2	..
Ears	27	21	Ringworm	..	1
Tonsils	9	111	Herpes	..	1
Adenoids	8	51	Scabies	..	7
Glands	6	8	Hernia	12	1
Nose	5	4	Congenital syphilis	1	..
Throat	..	2	Diarrhoea	52	..
Teeth	2	235	Phimosis	1	1
Thrush	3	..	Other conditions	33	26
Rickets	1	1	Cases referred to family physician	28	15
Eczema	28	7			

REPORTS FROM TREATMENT CLINICS

Dental Clinic:

Number of cases treated	236
Appointments not kept	60

Eye, Ear, Nose and Throat Clinic:

Operations—Tonsils and adenoids	55
Stick removed from nose	1
Treatments—Eye	255
Ear	165
Nose and Throat	90

(Of these 122 were new cases)

Refractions for Glasses, 3; home visits by doctor, 3.

Fees collected for operations—$190.00 (refunded $5.00).

Pre-natal letters sent, 18.

Out-of-town cases—Infants 59, pre-school 6; total, 65. (These cases are examined by the Provincial Nurse, as they are not allowed the privilege of interviewing the city doctors.)

Number of letters to outside points, 46.

Medicine Hat Welfare Clinic

Total number in attendance	1176
Total number of babies in attendance	910
Total number of pre-school children	266
Total number of new cases admitted, infants	143
Total number of new cases, admitted, pre-school	32
Total number re-admitted, pre-school	6
Number transferred to pre-school clinic	44
Number referred to family doctor, infants	21
Number referred to family doctor, pre-school	6
Number of babies discharged	12
Number of pre-school children discharged	45
Number of babies on roll	261
Number of pre-school children on roll	271
Number of deaths, infant	1
Number of breast-fed babies	287
Number of bottle-fed babies	282
Number of mixed feedings	137
Number of other feedings	204
Number of nurses' visits	1075
Number of clinics held	100
Average attendance	12
Out-of-town cases	15

DEFECTS FOUND

	Infants.	Pre-school.		Infants.	Pre-school.
Hernia	17	..	Mouth	1	..
Phimosis	23	..	Carious teeth	..	21
Congenital malformation	2	..	Diarrhoea	8	..
Other conditions	22	8	Eczema	23	..
Eyes	8	2	Impetigo	2	..
Ears	6	1	Furunculosis	1	1
Glands	4	2	Malnutrition	9	..
Tonsils	4	21	Rickets	2	1
Adenoids	..	6			

Travelling Child Welfare Clinic

It was necessary to send out three public health nurses in order to cover the increased demand for this service. A total of 123 clinics was held at rural points, at which 1,123 babies and 1,495 pre-school children were examined, or a total of 2,618 children. Of this number, 1,830 were found to have defects and 788 were without defects.

It is most encouraging to those engaged in this work to find the increased interest manifested in this branch of service, and the improvement noted in the children from year to year.

Edmonton Exhibition

Child welfare conferences were conducted each afternoon in the women's building, four children's specialists from the city giving their services in turn, assisted by two public health nurses. In all, 34 babies and children of pre-school age were examined.

The first-aid tent was also in charge of two public health nurses. A number of people were treated for minor accidents, etc., and the service was especially appreciated by those taking part in the pageant.

Travelling Operative Clinic

There were sufficient organized districts in the Province already established in 1928 to provide an itinerary for the travelling clinic. Forty centres comprising 383 school districts were served. One complete surgical unit went into the field; the staff consisted of a surgeon, an anaesthetist, two dentists, four nurses and a truck driver. Dr. Margaret Owens, whose appointment was made early in the year, was attached to the staff of the clinic as anaesthetist and examining physician.

From the month of April until September three nurses were employed in making school surveys preparatory to the visits of the travelling clinic. Two of these nurses were appointed temporarily and one was a permanent member of the staff.

Statistical Report

SCHOOL SURVEY

First inspection	7300	With malnutrition	1034
Not vaccinated	5004	With poor posture	645
With defects	5409	Orthopaedic cases	8
Without defects	1891		

SUSPECTED DEFECTIVE CONDITIONS

Vision	801	Tonsils	3848
Hearing	83	Teeth	3234
Adenoids	1917		

SYMPTOMS OF

Enlarged glands	628	Cleft palate	1
Tuberculosis	3	Eczema	1
Nervous symptoms	76	Acne	8
Pediculosis	53	Heart condition	3
Scabies	60	Spinal curvature	1
Impetigo	9	Abdominal condition	1
Ringworm	8	Goitre	4
Other skin conditions	138	Pyorrhoea	35
Astigmatism	2	Mental	1
Other eye conditions	32	Deaf and dumb	1

Home visits	20
Schoolroom talks	7
Communicable or infectious diseases	9

TRAVELLING CLINIC

Examined	4427	Circumcisions	97
Recommended for T. & A.	1916	Minor operations	150
Referred to physicians	46	Prescribed for	322
Referred to hospitals	5	Treated	318
T. & A. operations	1405	Eye cases	60

DENTAL CLINIC

Children examined	4385	Extractions	3021
Fillings	891	Extractions under general anaesthetic	541
Prophylaxis	23		

POINTS VISITED

Onoway, Cherhill, Sangudo, Wabamun, Mayerthorpe, Mosside, Darwell, Clyde, Jarvie, Eastburg, Dunstable, Paradise Valley, Bulwark, Naco, Markerville, Oyen, Collholm, Youngstown, Cessford, Coutts, Mountain View, Fishburn, Diamond City, Hillspring, Strathmore, Didsbury, Sundre, New Brigden, Pendryl, Breton, Millet, Clive, Mirror, Plamondon, Lac La Biche, Colinton, Slave Lake, Kinuso, Wanham, Grouard.

Lectures and Demonstrations.

During the year one nurse has been employed exclusively in lecturing and demonstrating to the women's organizations of the Province on home nursing and first aid and other health subjects of interest in the average home. This is a most popular and much appreciated service, and has had a steady growth from year to year. Sixty-six lectures and courses were held this year, with a total attendance of 4,344.

Pre-natal Service

One hundred and nine expectant mothers received the complete series of pre-natal letters during the year. These letters have been much appreciated.

Hospitals Branch

(W. B. Milne, C.A., *Supervisor*)

On December 31st, 1929, there were eighty-seven approved hospitals in the Province.

The following approved hospitals were opened: High Prairie, Community; Hardisty, St. Anne's; Lethbridge, St. Michael's; Mundare, General; Nanton, Dr. Keen's; Oyen, General; Stettler, Municipal; Vulcan, Municipal.

The following were closed: Forestburg, Cottage; Lethbridge, Van Haarlem; Nanton, Mrs. Millward's; Stettler, The Mills', the result being a net gain of four hospitals over 1928.

The totals grants paid for the year 1929 to hospitals and homes was $437,710.

These hospitals had a total bed capacity of 3,534, divided as follows: General, 2,520; maternity, 526; isolation, 244; tuberculosis, 244.

On an estimated population of 646,000 in 1929 we had one hospital bed for every 182.8 of the population, or 5.5 beds per thousand population; 66,741 patients were treated during the year, receiving 875,495 days' treatment. This means that hospital treatment was provided in 1929 to 10.3 per cent. of the population, or one in every 9.7 persons.

The average daily number of patients admitted was 182.9. The average number of days spent in hospital by each patient was 13.1, and if the sanatorium Junior Red Cross and S.C.R. patients were eliminated, this would be reduced to an average of 11.6. The average number of patients in hospital daily was 2,398.6, or one in every 269.3 of our population. Each bed provided accommodation for an average of 18.9 patients during the year.

The nursing staff of these approved hospitals consisted of 428 graduates, 743 pupil nurses, and 234 other attendants.

There were twelve nurses' training schools in the Province, the number of graduates for the year being 208. Twenty-one dietitians were employed.

During the year 7,896 maternity cases were cared for in these approved hospitals, maternity cases comprising 11.7 per cent. of the cases admitted. Living births were: Male 3,943, female 3,667, a total of 7,610. Multiple births totalled fifty-five, and there were 250 stillborn. The maternal deaths were fifty-two, this being a maternal death rate of .66 per cent. of total maternity cases admitted, and 6.8 per thousand living births.

The living births in Alberta in 1929 were 16,924. Therefore, 44.9 per cent. of the total living births took place in the Government approved hospitals.

In the hospitals reporting, 21,651 general anaesthetics were administered, and six deaths occurred from these.

One hundred and seventy-seven autopsies were performed, and the infections developed in hospitals totalled 319, divided in: Medical 111, surgical 155, obstetrical 53.

Communicable diseases treated in hospital, excluding typhoid fever and T.B., were 1,863, typhoid cases amounting to 177; tuberculosis cases totalled 634, pulmonary 481, and other forms 153.

Among other cases treated in hospital there were 777 cardiac, 1,061 rheumatic, 414 goitre, 264 venereal, and 565 malignant.

There were 342 deaths within ten days of surgical operations and 522 deaths within forty-eight hours after admission. Communicable diseases accounted for 164 deaths.

The approved hospitals reported 105,485 laboratory examinations and 28,211 X-ray examinations.

The total operating expenditure of approved hospitals for 1929 was $2,722,212.98—this included administration of $228,738.71, operating $2,163,494.94, and maintenance $329,979.33. The expenditure classed as capital, which is mostly repayments of principal on capital borrowing, and interest, amounted to $263,667.70, making a total cost of $2,985,880.68.

Earnings of these hospitals amounted to $3,323,168.17. On referring to the details of the earnings, it will be noted that the Alberta Government grant does not agree withe the total paid by the Province. This is accounted for by the fact that homes have not been included, and some of the smaller hospitals did not submit statements with sufficient information to warrant their inclusion in the report.

Of the earnings shown $420,312.50 was Alberta Government grant; municipal and other grants, which includes amounts paid by municipalities to take care of deficits, amounted to $296,083.29. Patients' fees earned amounted to $2,115,461.90; donations amounted to $108,485.03; taxes for municipal hospital purposes amounted to $269,877.88, this including tax requisitions, special agreements and minimum taxes; $72,947.57 was classed as sundry earnings.

The average cost per patient day was $3.38. The average cost per bed per day, not including capital repayments, was $2.30. The average earnings per bed per day was $2.81. The average total cost was divided as follows: Administration, 7.7%; operating, 72.5%; maintenance, 11%; capital repayments, 8.8%.

The statistical information that is given above has been obtained from financial and statistical statements which were requested from all hospitals for the year 1929. This being the first year that this information has been required, a good deal of difficulty has been experienced by some hospitals in completing the statistical forms. The Hospitals Branch, therefore, can only present these reports as being in accordance with information furnished by the hospitals.

The Department has had a good deal of correspondence with reference to corrections of the forms, and appreciates the co-operation of the hospitals supplying the information.

The following statements giving the details in connection with Alberta hospitals are submitted:

No. 1—Bed capacity, number of patients, number of days, nursing staff, etc.

No. 2—Nursing statistics, cases treated, anaesthetics, autopsies, etc.

No. 3—Expenses of administration, operating, maintenance and capital repayments.

No. 4—Hospital earnings.

No. 5—Costs per patient per day and per bed per day, earnings per bed per day.

Municipal Hospitals

Twenty municipal hospitals were in operation on December 31st, 1929.

This does not include sub-hospitals at Blackie and Craigmyle, as they are considered part of the hospital facilities at High River and Hanna.

New municipal hospitals were completed during the years at Grande Prairie and Stettler.

Additions were completed to Hanna and Drumheller hospitals, Hanna being provided for by a vote of the ratepayers on additional debentures, and Drumheller being provided from savings of the hospital district.

A further debenture issue to provide a hospital was also ratified by the ratepayers of the Innisfail Municipal Hospital District.

A new district was organized and ratified by the voters comprising the Peace River Municipal Hospital District. This district was fortunate in having turned over to it all the assets of the Irene Cottage Hospital, which has operated in the town of Peace River.

Statistics of the municipal hospitals will be found with the other approved hospitals of the Province.

STATISTICS OF ALBERTA HOSPITALS, 1929

Hospital	Bed Capacity					Number of patients admitted	Number of hospital days	Aver. days' stay in hospital	Aver. No. of patients in hospital daily	Nursing Staff			Nurses' training schools	No. graduated during the year	Dietitians	Remarks
	General	Maternity	Isolation	Tuberculosis	Total					Graduates	Pupil nurses	Other attendants				
Athabasca Municipal	11	3	2	....	16	427	4,727	11.0	12.9	3	....	2		....	....	
Banff, Brett	52	....	....	....	52	399	4,423	11.0	14.5	6	4	2		....	1	Open 304 days
Barrhead, St. Elizabeth	5	3	1	1	10	200	2,207	11.0	6.0	2	....	2		....	....	
Bassano Municipal	25	....	....	....	25	601	6,431	10.7	17.6	4	2	....		....	....	
Bentley Community	4	4	....	1	9	144	1,435	10.0	3.9	2	....	1		....	....	
Berwyn, W.I.	4	4	....	....	8	113	1,204	10.7	3.3	2	....	1		....	....	
Bonnyville, St. Louis	6	2	....	....	8	207	2,859	13.8	7.8	3	....	2		....	....	
Bonnyville, K.H.P.	8	5	3	1	17	73	1,418	19.4	3.9	2	1	....		....	....	
Calgary, Central Alberta Sanatorium	....	....	....	210	210	411	67,601	164.5	185.2	19	....	48		....	....	
Calgary General	167	23	....	....	190	5,970	67,059	11.2	183.7	13	98	7	Yes	21	1	
Calgary Isolation	....	....	80	....	80	588	13,002	22.1	35.6	3	8	2		....	....	
Calgary Grace	....	36	2	....	38	678	9,226	13.6	25.3	6	1	3		....	....	
Calgary Holy Cross	240	50	10	....	300	4,875	55,269	11.5	151.4	24	105	4	Yes	40	1	
Calgary Junior Red Cross	35	....	....	....	35	92	11,746	127.7	32.2	5	....	4		....	....	
Camrose, St. Mary's	39	11	....	....	50	1,101	11,081	10.0	30.4	7	16	1	Yes	5	....	
Cardston Municipal	14	8	....	....	22	816	6,685	8.2	18.3	6	1	3		....	....	
Castor, Rosary	30	....	....	....	30	546	5,778	10.6	15.8	5	....	3		....	....	
Cereal General	10	....	....	....	10	154	1,633	10.6	4.5	2	....	2		....	....	
Claresholm General	19	....	....	....	19	420	3,890	9.3	10.7	4	1	....		....	....	
Cold Lake, John Neil	6	2	2	2	12	291	3,230	11.1	8.8	3	....	2		....	1	
Coleman Miners' Union	13	....	....	....	13	227	3,418	15.0	9.4	3	....	1		....	....	
Consort General	10	5	1	....	16	416	4,212	10.1	11.5	3	....	1		....	1	
Coronation General	14	5	1	1	21	541	4,290	7.9	11.8	4	....	3		....	....	
Didsbury General	11	....	....	....	11	352	2,736	7.8	7.5	4	....	....		....	....	
Drumheller Municipal	83	16	2	....	101	1,792	19,845	11.1	54.4	9	15	15		....	....	
Edmonton Beulah Home	34	6	....	....	40	202	3,863	19.1	10.6	1	....	9		....	....	
Edmonton General	171	17	3	9	200	3,855	54,628	14.2	149.7	15	90	4	Yes	33	1	
Edmonton Grace	....	29	2	....	31	300	4,491	15.0	12.3	4	....	7		....	....	
Edmonton Misericordia	137	32	6	....	175	3,725	43,859	11.8	120.2	12	70	2	Yes	28	1	
Edmonton Royal Alexandra	226	24	....	....	250	7,483	94,222	12.6	258.1	29	114	9	Yes	29	2	
Edmonton Isolation	....	....	100	....	100	333	18,164	20.8	48.8	8	14	3	Yes	2	....	
Edmonton University (Civilian)	134	....	....	....	134	1,280	33,251	25.9	91.1	24	68	10	Yes	24	3	
Edmonton University (S.C.R.)	56	....	....	....	56	548	24,960	45.5	68.4					....	....	
Edmonton University (Junior Red Cross)	30	....	....	....	30	68	8,459	124.4	23.2					....	....	
Edson, St. John's	12	7	....	....	19	360	3,882	10.8	10.6	3	....	5		....	....	

STATISTICS OF ALBERTA HOSPITALS, 1929—Continued

Hospital	Bed Capacity					Number of patients admitted	Number of hospital days	Aver. days stay in hospital	Aver. No. of patients in hospital daily	Nursing Staff			Nurses training schools	No. graduated during the year	Dietitians	
	General	Maternity	Isolation	Tuberculosis	Total					Graduates	Pupil nurses	Other attendants				
Elk Point Municipal	7	6	1	2	16	645	6,793	10.5	18.6	4	....	2		....	....	
Empress Cottage	17	....	....	....	17	435	3,819	8.8	10.5	3	....	....		....	....	
Fairview W.I.	4	3	....	....	7	207	1,557	7.5	4.3	1	....	1		....	....	
Ft. Vermilion, St. Theresa	15	1	....	....	16	119	2,624	22.1	7.2	2	1	....		....	....	
Galahad, St. Joseph's	12	4	1	....	17	294	2,451	9.3	6.7	4	....	1		....	1	
Gleichen General	6	3	....	1	10	33	453	13.7	1.2	2	....	1		....	....	
Grande Prairie Municipal	35	5	....	....	40	996	9,188	9.2	25.2	9	....	....		....	....	
Grouard, St. Joseph's	20	....	2	2	24	161	3,406	21.2	9.3	2	....	2		....	....	
Hanna Municipal	41	10	2	1	54	1,285	14,149	11.0	38.8	10	4	3		....	....	
Craigmyle Sub.	6	3	....	....	9	114	1,211	10.6	3.3	2	....	1		....	....	
Hardisty, St. Anne's	19	1	....	....	20	428	3,768	8.8	10.3	3	....	2		....	1	
High Prairie Community	5	....	....	....	5	33	322	9.8	1.7	1	....	....		....	....	Open 184 days
High River Municipal	39	10	....	....	49	867	8,876	10.2	24.3	6	6	1		....	....	
Blackie Sub.	5	....	....	....	5	89	694	7.8	1.9					....	....	
Innisfail Municipal	15	5	....	....	20	749	7,770	10.4	21.3	5	....	2		....	....	
Islay Municipal	8	8	....	....	16	289	4,510	15.6	12.4	3	....	1		....	....	
Lacombe General	10	3	....	....	13	525	4,135	7.9	11.3	4	1	3		....	....	
Lamont Public	54	10	1	5	70	1,708	20,355	11.9	55.8	3	30	....	Yes	7	1	
Lethbridge, Galt	59	3	3	3	68	2,109	22.454	10.6	61.5	7	24	4	Yes	7	1	
Lethbridge Isolation	....	....	14	....	14	122	2,056	16.9	5.6	1	....	1		....	....	
Lethbridge, St. Michael's	20	7	....	....	27	735	8,347	11.4	22.9	11	....	1		....	....	Including Van Haarlem Hospital
Lloydminster Municipal	24	12	2	2	40	613	7,045	12.9	21.8	12	3	10		....	....	Alberta patients only
Macleod General	54	9	1	....	64	292	3,011	10.3	8.3	4	....	6		....	....	
Mannville Municipal	11	3	....	....	14	322	2,891	9.0	7.9	3	....	....		....	....	
Medicine Hat General	106	21	....	....	127	3,306	31,716	9.6	86.9	8	38	....	Yes	9	....	
Nordegg General	20	....	....	....	20	118	1,528	12.9	4.2	....	....	....		....	....	
Olds General	7	4	....	....	11	233	1,969	8.5	5.4	3	....	....		....	....	
Oyen General	3	2	....	....	5	73	552	7.6	3.0	1	....	2		....	....	Open 184 days
Onoway Municipal	10	....	....	....	10	219	1,802	8.2	4.9	3	....	....		....	....	
Peace River Irene Cottage	10	....	....	....	10	273	3,074	11.3	8.4	2	....	2		....	....	
Pincher Creek, St. Vincent	6	7	....	....	13	256	2,393	9.1	6.6	2	....	4		....	....	
Provost Municipal	14	6	....	....	20	515	5,999	11.6	16.4	4	2	....		....	....	
Radway, St. Joseph's	5	....	....	1	6	285	2,609	9.2	7.1	3	1	1		....	....	

Red Deer Municipal	29	6	....	....	35	721	8,734	12.1	23.9	6	....	2		....	....	
St. Paul, St. Theresa	19	6	....	....	25	627	5,781	9.2	15.8	5	6	6		....	1	
Smoky Lake, Geo. McDougall	11	3	....	....	14	441	3,093	7.0	8.5	3	1	1		....	....	
Stettler Municipal	16	8	....	....	24	105	971	9.2	22.6	7	....	5		....	....	Open 43 days
Trochu, St. Mary's	15	5	....	....	20	318	3,827	12.0	10.5	2	2	1		....	....	
Vegreville General	28	12	....	....	40	1,096	11,445	10.4	31.4	3	12	....	Yes	3	1	
Vegreville, R. M. Boswell	13	6	....	....	19	606	4,101	6.8	11.2	4	....	....		....	....	
Vermilion Municipal	12	8	....	....	20	642	8,488	13.2	23.3	4	2	....		....	....	
Viking Municipal	7	6	....	1	14	466	4,559	9.8	12.5	3	....	1		....	....	
Vilna, Our Lady's	13	4	1	1	19	254	2,046	8.1	5.6	3	....	2		....	1	
Vulcan Municipal	20	6	....	....	26	625	5,169	8.2	14.2	5	1	5		....	....	
Wainwright Municipal	16	4	....	....	20	467	5,614	12.0	15.4	4	....	....		....	....	
Wayne General	9	4	1	....	14	302	2,356	7.8	6.5	2	....	1		....	1	
Westlock General	24	6	....	....	30	684	4,661	6.8	12.8	4	....	1		....	1	
Wetaskiwin General	15	4	....	....	19	851	5,039	5.9	13.8	5	1	....		....	....	
	2520	526	244	244	3534	66,741	875,495	13.1	2398.6	428	743	234	12	208	21	
Excluding Sanatorium, Junior Red Cross and S.C.R.					3203			11.6	2089.7							

| | No. of maternity cases | Percentage maternity cases admitted to number of admissions | No. of living births | | No. of multiple births | Tuberculosis | | | No. of communicable diseases except Typhoid and T.B. | No. Typhoid cases | No. Cardiac disease cases treated | No. cases of Rheumatism treated | No. malignant disease cases treated | No. Goitre cases treated | No. Venereal diseases cases treated | Infections Developed in Hospital | | | | Obstetrical | | | | | | Deaths | | | | | |

EXPENSES OF ALBERTA HOSPITALS, 1929

	ADMINISTRATION						OPERATING									MAINTENANCE					CAPITAL REPAYMENTS		
	Office Expenses	Stationery, Printing, Postage	Telegraph, Telephone	Insurance and Taxes	Sundry	Total Administration	Salaries	Medical and Surgical Supplies	Food and Kitchen Supplies	Fuel, Light, and Power	Ice and Water	Laundry	Freight, Express, Cartage	Sundry	Total Operating	Buildings and Grounds	Furniture and Equipment	Dry Goods	Sundry	Total Maintenance	Total Administration, Operating and Maintenance	Mortgage or Debenture Principal	Mortgage or Debenture Interest	Sundry
	13.32	263.96	107.20	205.81	51.70	1,482.39	6,025.35	1,645.60	2,988.99	1,724.60	26.00	144.35	51.72	387.85	12,994.46	899.44	429.39	500.28		1,829.11	16,305.96			
			152.74	119.50	167.72	2,138.96	13,918.00	1,489.64	14,413.00	4,265.21	304.12	420.00		981.99	35,791.96	1,534.15			909.68	2,443.83	40,374.75			
	85.00		36.85			120.85	2,142.65	430.02	898.08	209.39		159.60	57.80	46.64	4,004.18		555.59			555.59	4,680.62			
	25.05	130.10	186.20	338.00	650.44	1,928.79	7,993.23	2,361.54	4,116.21	1,960.83	516.00	1,381.24			18,329.05	2,091.31	479.90		94.45	2,665.66	22,923.50	2,500.00	245.00	
		17.31	66.30	11.25		96.36	2,190.37	643.78	773.48	347.98	20.00		10.87		3,976.48	341.00	241.16			582.16	4,654.00			
		11.21	26.30	53.10		90.61	1,272.15	236.12	693.10	157.05	54.35		6.90	14.75	2,434.42	3.90	45.00	1.35		49.35	2,574.38			
	18.15	102.16	46.50	131.20		423.01	3,475.00	1,083.76	1,404.97	1,220.60	463.30	139.87	72.47		7,859.96	269.50		363.71	56.47	689.68	8,972.65			
		81.63	317.85		33.82	403.30	3,488.34	427.45	1,424.71	766.01	124.52	171.32	158.41		6,560.76	807.73		90.71		898.44	7,862.50			
		4,236.74	1,813.92	2,102.00	383.07	25,067.53	81,126.21	28,544.63	55,566.76	12,104.96	1,763.98	11,365.79	213.44	223.30	190,909.07	36,592.37	1,158.71	9,986.93	1,508.96	49,246.97	265,217.57	2,667.80	9,589.89	
		205.00	196.55	226.00		4,699.75	8,525.10	2,256.94	9,662.74	1,825.17	234.81	1,440.00		15.00	23,959.76	4,078.76	156.25	1,423.09	595.67	6,253.77	34,907.28	1,007.18	3,313.76	
	222.29	156.98	176.22	23.33	222.41	1,295.73	4,949.40	1,262.20	3,382.82	1,075.71	153.35	389.06		49.80	11,262.34	2,022.82	1,836.43			3,859.25	16,417.32			
	381.76	1,532.32	1,795.03	4,910.98		19,360.09	56,696.80	33,223.58	46,637.83	20,233.26	3,756.53	1,536.61	1,317.84		163,402.45	27,379.68	3,676.01	16,181.25		47,236.94	229,999.48	5,000.00	17,455.25	
	743.17	358.15	149.37	106.50	443.76	3,242.64	8,545.08	2,259.96	6,736.29	1,791.88	1,813.58		327.36		23,474.63	561.27	832.20	688.92	460.91	2,543.30	27,260.57	7,200.00	2,796.00	
		242.36	139.51	148.00	244.75	1,925.12	9,500.25	2,800.09	6,164.83	1,150.90	172.00	1,320.00		249.15	21,357.22	471.32				471.32	23,753.66			
	384.55	116.29	137.50	997.00		1,635.34	2,716.25	1,597.01	3,307.79	1,790.24	242.20	230.00	341.25	469.59	10,694.33	1,004.98	445.80	489.60	171.29	2,111.67	14,441.34			
			32.30			32.30	1,045.50	676.16	1,253.11	288.78					4,163.54		137.60		68.79	206.48	4,402.32			
		51.00	153.35	113.00		317.35	7,325.25	2,775.03	3,424.96	733.43	157.00	354.65	238.41		15,008.73	340.55	605.00	307.96	150.00	1,403.51	16,729.59			1,100.00
		106.94	197.72		87.60	392.26	4,725.37	773.03	2,216.90	599.09	45.00	48.90	69.27	94.00	8,571.56	727.00	430.00		195.00	1,352.00	10,315.82			
	180.00	250.00	65.00	223.35	50.00	768.35	4,890.00	753.00	3,149.00	850.00	228.00	720.00	60.58	25.00	10,675.58	500.30	371.00	200.00		1,071.30	12,515.23			
		13.67	102.30			115.97	4,189.55	1,039.76	2,196.88	713.50	205.55	815.88	160.84		9,321.96	36.00	513.75		266.50	816.25	10,254.18			
	200.40	15.90	129.25	130.30	60.75	536.60	5,336.15	1,127.74	3,419.91	1,124.26		38.80	56.55		11,103.41	455.94	273.70			729.64	12,369.65			
	451.00	36.55	161.45		50.40	548.40	5,076.23	1,134.07	2,105.16	908.67	198.35	1,155.80		13.75	10,592.63	157.45	53.25	66.29	2.00	278.99	11,420.02			
	88.15	589.69	293.20	656.72	1,703.76	5,782.52	24,273.81	4,726.19	14,972.51	3,817.20	827.18	2,170.34		1,939.06	52,726.39	3,193.48		1,393.06		4,586.54	63,095.65	3,339.02	4,677.53	1,142.00
	110.82	212.74	67.85	256.00	25.10	1,038.51	4,924.27	673.17	3,927.79	1,198.32				832.70	11,556.25	1,076.34			207.65	1,283.99	13,874.75	875.00		288.00
	1,465.42	2,837.50	876.76	1,365.42	232.95	8,998.05	60,011.45	21,694.09	43,179.82	7,694.78	2,113.87	5,409.83		2,064.32	142,168.16	19,241.16	2,668.68	7,537.27	132.00	29,579.09	180,745.26		11,603.96	
	237.05	94.80	134.01	147.30	65.74	1,553.90	4,693.43	475.19	2,784.32	1,072.39	134.35	141.75	13.30	24.47	9,339.70	108.00	1,217.15			1,325.15	12,218.78			
		1,248.39	481.70	1,645.86	3,887.06	9,263.01	52,773.66	17,141.02	35,375.15	9,485.54	1,444.39	1,052.01	1,553.05		118,824.81	3,557.48	5,126.99	9,716.26		18,200.73	146,440.37	20,000.00	13,926.00	
		885.38	417.26	990.60	646.41	11,165.75	25,312.30	3,593.31	13,890.71	6,764.69	884.94	490.83		2,167.86	55,103.74	393.13	1,013.05	986.89	6,143.00	8,536.07	72,805.56	4,838.81	8,800.00	
		4,112.85	1,062.29	2,462.32	2,175.51	30,298.69	91,437.03	44,309.49	72,309.75	14,807.68	4,614.56	2,594.50		6,548.28	236,621.29	1,173.69	17,064.67	5,470.72	34,083.85	57,792.93	324,712.91	16,706.85	43,414.66	
	547.24	2,280.41	1,112.11	987.38	6,388.95	19,684.31	102,119.90	29,795.70	59,913.92	6,444.20	472.60	2,333.51		24,560.87	225,670.70	5,644.16	1,971.71			7,615.87	252,970.88			
	11.47	131.50	108.90		275.20	526.87	5,136.34	1,361.03	4,629.12	591.66	66.00	238.40	137.64	54.13	12,114.32	546.70	1,377.55	198.24	204.40	2,326.89	14,968.08			
	8.70	387.83	115.70	125.00	122.25	1,683.68	6,283.23	2,942.06	4,280.60	2,325.00	41.50				15,872.48	83.70	301.25		561.98	946.93	18,503.09	1,280.45	1,375.00	
		186.87	89.47	45.00		1,021.34	4,942.17	1,946.61	2,695.50	593.10	36.00	1,092.80		632.15	11,938.33						12,959.67			
		1.00	18.00			19.00	3,082.00	150.00	1,355.00	272.00	98.00				4,957.00	459.75	254.10	70.82		784.67	5,760.67			
		20.00		55.00		75.00	2,230.00	438.00	1,230.25	165.00	15.00	150.00	75.00	80.00	4,433.25						4,508.25			
		160.50	113.35		198.50	382.35	2,942.75	901.91	1,959.68	803.86		57.44		332.99	6,998.63				748.10	748.10	8,129.08		990.00	
		30.15	57.25	32.40		119.80	720.00	227.50	810.40	176.20					1,934.10						2,053.90			
		394.77	293.71	300.00	329.25	4,224.63	11,344.77	4,747.87	6,163.32	3,178.03	148.10	353.33	49.73		26,190.70	678.81	338.93	19.50	430.01	1,467.25	31,872.58	3,500.00	3,570.00	543.27
		75.00	25.00	350.00		450.00	2,000.00	658.34	1,615.00	575.00	85.00	135.00	300.00		5,368.34	35.00	1,951.00	220.00		2,206.00	8,024.34			
	74.41	536.68	449.65	750.40	415.89	5,213.03	17,782.60	5,808.17	12,651.07	5,131.55	305.80	2,373.41		233.20	44 285.89	3,135.75	502.56	1,792.55	69.13	5,499.99	54,998.91	2,059.78	4,447.40	1,739.81
		44.83	76.30		121.13	974.30	724.75	2,499.99	1,046.02				427.64	17.64	5,690.34			800.00	48.26	848.26	6,659.73	1,300.00	2,476.52	
		5.65		65.00	60.65	447.04	94.78	193.80	16.00			5.50		19.83	779.55	49.40	149.70			199.10	1,030.70			
	96.22	650.16	289.18	273.22	600.33	2,729.11	13,219.30	4,163.57	7,623.41	859.11	426.55	2,941.97		4,514.68	33,748.50	261.75	100.55	1,140.00		1,502.30	38,280.00	2,154.33	3,037.27	
		478.44	158.89	573.29	1,012.20	3,678.22	9,481.78	2,524.34	5,093.65	1,455.56	88.06			634.60	19,277.99	805.63	47.50		13.65	866.78	23,822.99	1,750.00	1,890.00	
	81.95	209.70	82.10	107.75	160.00	1,378.30	5,185.75	1,544.40	3,031.88	1,519.34					11,281.37	658.13	1,520.72		149.10	2,327.95	14,987.62	1,000.00	1,785.58	
		101.45	134.05	156.00	38.13	589.63	6,255.65	2,155.98	2,217.99	1,195.29	1.00			179.70	12,719.41	293.30	461.05	270.75	48.08	1,073.18	14,382.24			
	454.69	528.09	966.12	403.22	723.99	6,634.11	13,976.75	10,521.02	15,362.38	4,164.94	1,042.24	2,422.87		1,052.62	48,542.82	1,758.76	480.00	511.23	467.91	3,217.90	58,394.83			
	271.42	1,250.09	440.54	658.80	1,286.14	7,103.74	22,469.25	7,165.57	18,398.21	5,682.21	879.25			133.89	54,728.38	1,759.82	890.41	748.25		3,398.48	65,230.60	667.01	2,802.71	
			40.40	62.32		1,874.99	236.93	1,130.51	280.51	70.79		69.42			3,713.15	1,053.21	37.55		250.55	1,341.40	5,167.27	302.43	600.00	
	558.41			837.90	385.00	2,106.31	6,961.44	2,633.60	3,506.82	527.56	231.10	1,244.82		1,860.03	16,965.37	682.16		186.55	359.85	1,228.56	20,300.24		1,275.95	1,016.85
	85.36	580.13	351.85	358.16	478.11	4,003.61	19,052.00	2,990.09	9,627.44	4,613.78		363.45	264.22	186.22	36,997.20			682.21	664.22	1,346.43	42,347.24			
				150.00		895.00	8,358.00	1,426.38	7,470.91	2,192.86	120.00	649.85		649.85	20,219.00	561.31	350.88	1,457.46	32.88	2,402.53	23,516.53	1,450.58		
	3.25	112.52	75.20		107.24	935.66	6,871.61	1,271.64	3,948.43	1,317.91	42.30	1,020.00	498.07		11,169.56	264.69	99.45			364.29	12,468.51	1,000.00	785.35	
		1,065.81	537.26	1,597.08	2,064.94	7,215.09	26,055.43	7,449.54	16,045.25	3,237.44	192.50	5,135.65			58,115.81	4,945.59	1,944.70	1,247.09	1,108.21	9,245.59	74,576.49			
		5.00	8.00	6.40	136.00	155.40	1,540.00	195.60	1,327.56	201.50	38.90			200.00	3,502.66			24.00		24.00	3,582.06			935.00
	5.00	72.02	134.30	105.00	20.30	681.62	4,431.35	661.63	1,479.34	427.61	240.00	97.90	26.35	68.25	7,432.43	18.95	506.45	460.90	106.06	1,092.36	9,206.41			
	10.00	3.50	60.05	22.15		95.70	1,419.55	393.91	1,226.30	193.40	48.00	92.10	12.50	300.00	3,685.76		35.00			35.00	3,816.46			
		75.80	57.92		137.80	785.02	4,213.22	1,479.26	1,164.59	690.38	40.00	300.00			7,887.45	264.43	670.66			935.09	9,607.56	300.00	47.00	
		68.45	67.20	54.00	105.64	620.29	2,169.05	2,888.89	1,709.99	592.31	122.70	351.40			7,834.34	150.00	310.70		1,613.30	2,074.00	10,528.63			
	120.00	80.00	161.00			443.00	198.70	3,806.10	1,043.75	391.00	120.00			75.00	5,634.55	1,100.00	350.00	303.50		1,753.50	7,831.05			
	101.54	216.88	178.55	150.00	500.12	1,703.59	8,422.85	1,499.19	5,137.30	2,382.11	171.20			241.73	17,854.38	949.60	374.18	305.53		1,629.31	21,187.28	1,310.84	2,354.00	
	112.94	233.83	75.30		27.85	449.92		509.54	2,270.47	900.35	78.60	43.00	116.68	71.60	2,999.24	755.35	256.75	549.95	285.85	1,847.90	6,297.06		1,501.00	235.85
	127.50	138.46	142.55	167.50	529.22	1,825.23	10,703.28	2,250.51	5,389.70	2,123.74	108.80			55.61	20,630.84	169.55	295.57	1,777.82		2,242.94	24,699.01		3,194.07	4.80
	405.17	173.77	78.30	100.00	15.00	872.24	4,630.72	1,822.61	4,497.61	1,237.85		461.50			12,870.29	1,051.35	725.98	684.91	333.92	2,796.16	16,548.69		437.50	
	22.75	92.30	111.25		3.00	229.30	6,126.50	755.01	3,046.53	1,899.33	43.60		228.00		12,098.97	214.37	69.19			283.56	12,611.83		239.10	
	48.10	422.02	112.92	663.50	797.02	2,918.81	1,745.35	1,029.61	675.26	282.67		125.59		125.59	3,858.48	354.36	6.70			361.06	7,138.35	2,000.00	2,200.00	1,300.00
	24.35	16.50	108.55	75.00		584.40	4,320.00	1,190.24	2,347.04	648.46	99.28	112.25	85.75		8,803.01	1,078.86	731.01	101.32		1,911.19	11,298.60			
	112.00	50.00	125.50	105.00	15.50	888.00	7,890.00	3,745.90	7,449.00	2,687.50	405.00	230.00	50.00	25.00	22,482.50	2,040.00	480.00	70.40	20.70	2,611.10	25,981.60			
	75.00	80.00	92.60		247.60	495.20	5,883.00	1,030.80	1,953.68	1,098.78	18.00	480.00	181.00	40.00	10,682.26	1,503.82	31.588		33.00	1,852.70	13,030.16			
	10.00	247.25	155.53	225.00	167.69	1,879.67	7,797.05	1,824.57	3,899.02	2,644.58	169.40	243.78	72.75	75.47	16,226.62	429.95	36.25	148.01	32.70	646.91	18,753.20	2,069.56	2,224.20	
		136.67	99.20	100.00	256.22	1,421.09	6,583.27	891.82	2,636.60	844.65	69.15	16.00	181.80		10,923.19	757.61	740.84	234.58	897.70	2,630.73	14,975.01	1,795.00	1,365.00	
	267.21	98.89	44.20	129.00	12.75	552.05	628.05	795.86	1,421.31	640.16	6.60	25.50	164.81		3,682.29						4,234.34		1,218.03	
	56.45	346.09	288.00	586.00	536.00	3,424.99	7,287.00	2,665.88	3,784.16	2,660.00	145.00	535.00			17,077.04	163.00			221.00	684.00	21,186.03	1,615.00	1,846.00	
	3.15	81.79	109.85	61.00	322.00	1,268.19	6,248.40	1,051.98	3,762.50	1,197.20				923.78	13,183.95	223.30			144.97	368.27	14,810.41	1,750.00	1,828.75	
	82.37	15.00		100.00		557.37	3,869.70	308.06	2,055.55	919.95			13.60		7,166.86	331.60	278.10			609.70	8,333.93	783.65	232.15	
	45.00	110.40	228.82			569.81	2,700.40	1,797.26	3,569.97	1,466.63		147.10	90.75		9,772.11	91.26	1,291.79	278.00		1,661.05	12,002.97	1,400.00	2,215.00	
		125.12	87.20	106.06		528.38	6,167.03	1,682.90	2,874.30	1,914.88	217.59	850.00		23.50	13 730.20	1,605.29	460.89		26.05	2,092.68	16,351.26			
	$7,596.38	$30,001.15	$17,582.30	$27,884.87	$29,628.79	$228,738.71	$911,210.37	$309,370.06	$619,813.12	$177,291.43	$26,994.85	$57,670.80	$7,775.20	$53,369.61	$2,163,494.94	$146,028.15	$60,341.07	$69,691.86	$53,918.25	$329,979.33	$2,722,212.98	$93,623.29	$161,659.63	$8,384.78

EARNINGS OF ALBERTA HOSPITALS, 1929

	GRANTS		Patients' Fees	Donations	Tax requisi-tions	Sundry earnings	Total earnings
	Alberta Government	Municipal and others					
Athabasca, Municipal	$ 2,363.50	.....	$ 6,099.44	.....	$ 9,508.90	$ 419.69	$ 18,391.53
Banff, Brett	2,211.50	.....	16,441.00	.....	.....	25,776.48	44,428.98
Barrhead, St. Elizabeth	1,103.50	.....	6,627.00	$ 205.00	.....	.....	7,935.50
Bassano, Municipal	3,215.50	.....	11,972.00	.....	13,047.15	1,935.77	30,170.42
Bentley, Community	717.50	.....	3,813.50	69.05	.....	.....	4,600.05
Berwyn, W.I.	602.00	.....	1,795.97	374.52	.....	.....	2,772.49
Bonnyville, St. Louis	1,429.50	.....	4,740.00	3,800.00	.....	1,233.00	11,202.50
Bonnyville, K. H. Prettie	709.00	.....	1,579.36	6,384.34	.....	492.89	9,165.59
Calgary, General	33,529.50	$ 71,686.13	170,040.58	.....	.....	2,219.05	277,475.26
Calgary, Isolation	6,502.00	22,188.41	10,537.81	.....	.....	.....	39,228.22
Calgary, Grace	4,613.00	500.00	9,690.62	2,413.40	.....	78.11	17,295.13
Calgary, Holy Cross	27,634.50	.....	213,446.29	26,091.35	.....	.....	267,172.14
Camrose, St. Mary's	5,540.50	.....	38,864.00	375.00	.....	853.45	45,632.95
Cardston, Municipal	3,342.50	.....	8,309.20	.....	16,883.06	.....	28,534.76
Castor, Rosary	2,889.00	.....	19,261.58	361.00	.....	220.50	22,732.08
Cereal, General	816.50	.....	4,046.61	13.00	.....	.....	4,876.11
Claresholm, General	1,943.00	5,842.87	13,557.72	.....	.....	200.00	21,543.59
Cold Lake, John Neil	1,615.00	3,877.00	598.16	4,242.75	.....	.....	10,332.91
Coleman, Miners'	1,709.00	.....	11,332.63	.....	.....	.....	13,041.63
Consort, General	2,106.00	.....	10,289.45	29.70	.....	88.00	12,513.15
Coronation, General	2,145.00	.....	11,447.55	50.77	.....	33.32	13,676.64
Didsbury, General	1,368.00	2,400.00	8,243.30	128.74	.....	.....	12,140.04
Drumheller, Municipal	9,922.50	.....	43,047.89	.....	27,641.55	1,739.90	82,351.84
Edmonton, Beulah Home	2,431.50	1,000.00	7,195.48	6,847.45	.....	388.48	17,862.91
Edmonton, General	27,424.00	10,500.00	169,796.26	3,187.95	.....	.....	210,908.21
Edmontton, Grace	2,245.50	.....	7,586.37	3,144.32	.....	.....	12,976.19
Edmonton, Misericordia	21,929.00	8,000.00	129,299.27	34,187.50	.....	.....	193,415.77
Edmonton, Isolation	9,082.00	54,564.90	34,311.49	.....	.....	.....	97,958.39
Edmonton, Royal Alexandra	47,111.00	84,195.42	287,239.68	.....	.....	.....	418,546.10
Edmonton, University	56,367.00	8,736.00	235,693.96	190.00	.....	.....	300,980.96
Edson, St. John's	1,941.00	2,500.00	10,003.50	60.00	.....	122.85	14,627.35
Elk Point, Municipal	3,396.50	160.00	8,895.56	20.00	11,603.85	.....	24,075.91
Empress, Cottage	1,909.50	.....	15,017.17	.....	.....	.....	16,926.67
Fairview, W.I.	778.50	.....	4,957.00	.....	.....	65.00	5,800.50
Fort Vermilion, St. Theresa	1,312.50	.....	2,093.25	2,200.00	.....	.....	5,605.75
Galahad, St. Joseph's	1,305.50	.....	6,671.42	2,895.00	.....	671.75	11,543.67
Gleichen, General	226.50	.....	1,311.55	.....	.....	.....	1,538.05
Grande Prairie, Municipal	4,594.00	.....	16,308.75	1,921.45	19,142.89	2,974.30	44,941.39
Grouard, St. Joseph's	1,703.00	3,516.50	3,406.00	.....	.....	.....	8,625.50
Hanna, Municipal	7,680.00	.....	27,917.00	.....	27,139.46	856.51	63,592.97
Hardisty, St. Anne's	1,884.00	.....	16,094.50	1,580.00	.....	64.75	19,623.25

EARNINGS OF ALBERTA HOSPITALS, 1929—Continued

	GRANTS		Patients' Fees	Donations	Tax requisitions	Sundry earnings	Total earnings
	Alberta Government	Municipal and others					
High Prairie, Community	$ 161.00	.....	$ 602.84	$ 530.19	.....	.....	$ 1,294.03
High River, Municipal	4,785.00	.....	13,306.65	.....	$ 23,091.55	$ 3,370.70	44,553.90
Innisfail, Municipal	3,885.00	.....	10,683.02	.....	13,388.51	1,307.71	29,264.24
Islay, Municipal	2,255.00	.....	4,101.00	.....	12,000.00	.....	18,356.00
Lacombe, General	2,067.50	.....	13,706.21	80.40	.....	266.80	16,120.91
Lamont, Public	10,177.50	$ 2,750.00	43,424.82	.....	.....	15,875.56	72,227.88
Lethbridge, Galt	11,227.00	.....	62,852.15	25.00	.....	2,847.44	76,951.59
Lethbridge, Isolation	1,028.00	272.61	3,664.00	.....	.....	1,366.70	6,331.31
Lethbridge, St. Michael's	2,497.50	.....	22,441.75	183.00	.....	55.00	25,177.25
Lloydminster, Municipal	3,972.50	3,726.00	34,456.75	406.00	.....	25.20	42,586.45
Macleod, General	1,932.00	.....	22,789.34	.....	.....	.....	24,721.34
Mannville, Municipal	1,445.50	.....	3,848.70	.....	9,390.00	.....	14,684.20
Medicine Hat, General	15,521.00	.....	91,861.55	416.00	.....	920.00	108,718.55
Nordegg, General	764.00	.....	4,748.56	.....	.....	.....	5,512.56
Olds, General	984.50	.....	7,800.00	.....	.....	.....	8,784.50
Oyen, General	276.00	.....	2,772.50	.....	.....	483.50	3,532.00
Onoway, Municipal	901.00	.....	2,189.30	.....	8,003.69	.....	11,093.99
Peace River, Irene Cottage	1,537.00	.....	9,192.50	256.25	.....	1,291.85	12,277.60
Pincher Creek, St. Vincent's	1,196.50	400.00	6,228.75	1,753.50	.....	500.00	10,078.75
Provost, Municipal	2,999.50	.....	7,891.10	.....	15,078.52	1,704.39	27,673.51
Radway, St. Joseph's	1,304.50	.....	5,213.45	378.75	.....	.....	6,896.70
Red Deer, Municipal	4,367.00	.....	25,647.90	.....	1,343.12	.....	31,358.02
St. Paul, St. Theresa	2,890.50	.....	16,747.70	442.25	.....	.....	20,080.45
Smoky Lake, Geo. McDougall	1,546.50	5,000.00	4,893.41	.....	.....	.....	11,439.91
Stettler, Municipal	485.50	.....	1,399.00	.....	15,674.12	1,279.85	18,838.47
Trochu, St. Mary's	1,913.50	.....	6,910.00	1,760.00	.....	.....	10,583.50
Vegreville, General	5,722.50	.....	24,046.00	17.50	.....	.....	29,786.00
Vegreville, R. M. Boswell	2,050.50	.....	8,044.00	10.00	.....	75.00	10,179.50
Vermilion, Municipal	4,249.00	.....	9,470.50	.....	14,142.00	725.80	28,587.30
Viking, Municipal	2,279.50	.....	5,371.70	.....	12,900.00	365.35	20,916.55
Vilna, Our Lady's	1,023.00	.....	5,646.00	.....	.....	.....	6,669.00
Vulcan, Municipal	2,584.50	.....	10,694.50	.....	11,008.04	.....	24,287.04
Wainwright, Municipal	2,806.00	.....	7,843.30	10.00	8,891.47	.....	19,550.77
Wayne, General	1,178.00	.....	8,797.78	.....	.....	.....	9,973.78
Westlock, Immaculata	2,330.50	.....	19,028.91	1,443.90	.....	.....	22,803.31
Wetaskiwin, General	2,619.50	4,267.45	17,566.39	.....	.....	52.92	24,506.26
	$420,312.50	$296,083.29	$2,155,461.90	$108,485.03	$269,877.88	$ 72,947.57	$3,323,168.17

COSTS OF ALBERTA HOSPITALS, 1929

	Costs including administration, operating and maintenance			Cost including capital repayments	Earnings including grants and contributions from municipalities		Percentages of Total Cost			
	Per patient per day	Per bed per year	Per bed per day	Per bed per year	Per bed per year	Per bed per day	Administration	Operating	Maintenance	Capital repayments
Athabasca, Municipal	$ 3.45	$1019.12	$ 2.79	$1019.12	$1149.47	$ 3.15	9.0	79.7	11.3	.....
Banff, Brett	9.13	932.22	2.55	932.22	1025.85	2.81	5.3	88.6	6.1	.....
Barrhead, St. Elizabeth	2.12	468.06	1.28	468.06	793.55	2.17	2.6	85.5	11.9	.....
Bassano, Municipal	3.56	916.94	2.51	1026.74	1206.82	3.30	7.5	71.4	10.4	10.7
Bentley, Community	3.24	517.11	1.42	517.11	511.12	1.40	2.0	85.4	12.6	.....
Berwyn, W.I.	2.14	321.79	.88	321.79	346.56	.95	3.5	94.6	1.9	.....
Bonnyville, St. Louis	3.14	1121.58	3.07	1121.58	1400.31	3.84	4.7	87.6	7.7	.....
Bonnyville, K.H.P.	5.54	462.50	1.27	462.50	539.15	1.48	5.1	83.5	11.4	.....
Calgary, General	3.95	1395.88	3.85	1460.40	1460.40	4.00	9.0	68.8	17.8	4.4
Calgary, Isolation	2.68	436.34	1.19	490.35	490.35	1.34	11.9	61.1	15.9	11.0
Calgary, Grace	1.78	432.03	1.18	432.03	455.14	1.25	7.9	68.6	23.5	.....
Calgary, Holy Cross	4.16	766.66	2.10	841.52	890.57	2.44	7.7	64.7	18.7	8.9
Camrose, St. Mary's	2.46	545.21	1.49	745.13	912.65	2.50	8.7	57.7	6.8	26.8
Cardston, Municipal	3.55	1079.71	2.96	1079.71	1297.03	3.28	8.1	90.0	1.9	.....
Castor, Rosary	2.50	481.38	1.31	481.38	757.74	2.08	11.3	74.1	14.6	.....
Cereal, General	2.70	440.23	1.21	440.23	487.61	1.34	.7	94.6	4.7	.....
Claresholm, General	4.30	880.50	2.41	938.40	1133.87	3.11	1.8	84.2	7.8	6.2
Cold Lake, John Neil	3.19	859.65	2.36	859.65	861.08	2.36	3.8	83.1	13.1	.....
Coleman, Miners'	3.66	962.71	2.64	962.71	1003.20	2.75	6.1	85.4	8.5	.....
Consort, General	2.43	640.89	1.76	640.89	782.07	2.14	1.1	90.9	8.0	.....
Coronation, General	2.88	589.03	1.61	589.03	651.27	1.78	4.3	89.8	5.9	.....
Didsbury, General	4.17	1038.18	2.84	1038.18	1103.64	3.02	4.8	92.7	2.5	.....
Drumheller, Municipal	3.18	624.71	1.71	715.39	815.36	2.23	8.0	73.0	6.3	12.7
Edmonton, Beulah Home	3.59	346.87	.95	375.76	446.57	1.22	6.9	76.9	8.5	7.7
Edmonton, General	3.31	903.73	2.47	961.75	1054.54	2.89	4.7	73.9	15.4	6.0
Edmonton, Grace	2.72	394.15	1.08	394.15	418.59	1.15	12.7	76.4	10.9	.....
Edmonton, Misericordia	3.34	836.80	2.29	1030.66	1105.23	3.03	5.2	65.9	10.0	18.9
Edmonton, Royal Alexandra	3.45	1298.85	3.56	1539.34	1674.18	4.59	7.9	61.5	15.0	15.6
Edmonton, Isolation	4.01	728.06	1.99	864.44	979.58	2.68	12.9	61.5	9.8	15.8
Edmonton, University	3.79	1149.73	3.15	1149.73	1368.10	3.75	7.8	89.2	3.0	.....
Edson, St. John's	3.86	787.79	2.16	787.79	769.86	2.11	3.5	80.9	15.6	.....
Elk Point, Municipal	2.72	1156.44	3.17	1322.41	1504.74	4.12	8.0	75.0	4.5	12.5
Empress, Cottage	3.39	762.33	2.09	762.33	995.69	2.73	7.9	92.1	.....	.....

COSTS OF ALBERTA HOSPITALS, 1929—Continued

	Costs including administration, operating and maintenance			Cost including capital repayments	Earnings including grants and contributions from municipalities		Percentages of Total Cost			
	Per patient per day	Per bed per year	Per bed per day	Per bed per year	Per bed per year	Per bed per day	Administration	Operating	Maintenance	Capital repayments
Fairview, W.I.	$ 3.70	$ 822.95	$ 2.25	$ 822.95	$ 828.64	$ 2.27	.3	86.0	13.7	.....
Fort Vermilion, St. Theresa	1.72	281.77	.77	281.77	350.36	.96	1.7	98.3	.....	.....
Galahad, St. Joseph's	3.32	478.18	1.31	536.42	679.04	1.86	4.2	76.7	8.2	10.9
Gleichen, General	4.53	205.39	.56	205.39	153.81	.42	5.8	94.2	.....	.....
Grande Prairie, Municipal	3.47	796.81	2.18	987.15	1123.53	3.08	10.7	66.3	3.7	19.3
Grouard, St. Joseph's	2.36	334.34	.92	334.34	359.40	.98	5.6	66.9	2.7	.....
Hanna, Municipal	3.58	873.00	2.39	1003.90	1009.41	2.77	8.2	70.1	8.7	13.0
Hardisty, St. Anne's	1.77	332.97	.91	521.86	981.16	2.69	1.2	54.5	8.1	36.2
High Prairie, Community	3.20	412.28	1.13	412.28	517.61	1.42	5.9	74.8	19.3	.....
High River, Municipal	4.00	708.89	1.94	805.02	825.07	2.26	6.3	77.7	4.1	11.9
Innisfail, Municipal	3.06	1191.15	3.26	1373.15	1463.21	4.01	13.4	70.2	3.2	13.2
Islay, Municipal	3.32	936.73	2.57	1110.83	1147.25	3.14	7.7	63.5	13.1	15.7
Lacombe, General	3.48	1106.33	3.03	1106.33	1240.07	3.40	4.1	88.4	7.5	.....
Lamont, Public	2.87	834.21	2.29	834.21	1031.83	2.83	11.4	83.1	5.5	.....
Lethbridge, Galt	2.91	959.27	2.63	1010.30	1131.64	3.10	10.3	79.7	4.9	5.1
Lethbridge, Isolation	2.51	368.38	1.01	432.84	452.24	1.24	1.7	61.3	22.1	14.9
Lethbridge, St. Michael's	4.66	1502.24	4.12	1674.30	1864.98	5.11	9.3	75.1	5.3	10.3
Lloydminster, Municipal	2.67	1058.68	2.90	1058.68	1064.66	2.92	9.4	87.4	3.2	.....
Mannville, Municipal	4.31	890.68	2.44	1018.20	1048.87	2.87	6.6	78.4	2.5	12.5
Medicine Hat, General	2.35	587.22	1.61	587.22	856.05	2.35	9.7	77.9	12.4	.....
Nordegg, General	2.41	184.11	.51	230.85	275.63	.76	3.4	75.9	.5	20.2
Olds, General	4.68	836.95	2.29	836.95	798.59	2.19	7.4	80.7	11.9	.....
Oyen, General	6.91	1526.58	4.18	1526.58	1412.80	3.87	2.5	96.6	.9	.....
Onoway, Municipal	5.33	960.76	2.63	995.46	1109.40	3.04	7.9	79.2	9.4	3.5
Peace River, Irene Cottage	3.43	1052.86	2.88	1052.86	1227.76	3.36	5.9	74.4	19.7	.....
Pincher Creek, St. Vincent	3.27	602.39	1.65	602.39	775.29	2.12	5.6	72.0	22.4	.....
Provost, Municipal	3.53	1059.37	2.90	1237.61	1383.68	3.79	6.9	72.1	6.6	14.4
Radway, St. Joseph's	2.41	1049.51	2.88	1347.32	1149.45	3.15	5.6	49.5	22.8	22.1
Red Deer, Municipal	2.83	705.69	1.93	797.06	895.94	2.45	6.6	73.9	8.0	11.5
St. Paul, St. Theresa	2.86	661.95	1.81	679.45	803.22	2.20	5.1	75.8	16.5	2.6
Smoky Lake, Geo. MacDougall	4.08	900.85	2.47	917.92	817.14	2.24	1.8	94.1	2.2	1.9
Trochu, St. Mary's	2.95	564.93	1.55	564.93	529.28	1.45	5.2	77.9	16.9	.....
Vegreville, General	2.27	649.54	1.78	649.54	744.65	2.04	3.4	86.6	10.0	.....

Vegreville, R. M. Boswell	3.18	685.80	1.88	685.80	535.76	1.47	3.8	82.0	14.2	.....
Vermilion, Municipal	2.21	934.66	2.56	1152.35	1429.37	3.92	8.1	70.5	2.8	18.6
Viking, Municipal	3.28	1069.64	2.93	1295.35	1494.04	4.09	7.8	60.3	14.5	17.4
Vilna, Our Lady's	2.97	222.86	.61	286.97	351.00	.96	10.2	67.5	.....	22.3
Vulcan, Municipal	4.10	814.85	2.23	947.96	939.12	2.57	13.9	69.3	2.8	14.0
Wainwright, Municipal	2.64	740.52	2.03	919.46	977.54	2.68	6.8	71.7	2.0	19.5
Wayne, General	3.54	595.28	1.63	667.83	712.41	1.95	6.0	76.6	6.5	10.9
Westlock, Immaculata	2.58	400.10	1.10	520.60	760.11	2.08	3.7	62.6	10.6	23.1
Wetaskiwin, General	3.24	860.59	2.36	860.59	1289.80	3.53	3.2	84.0	12.8	.....
	$ 3.38	$838.65	$ 2.30	$921.05	$1024.56	$ 2.81	7.7	72.5	11.0	8.8

Eliminated: Sanatorium; Junior Red Cross, Calgary; Macleod, and Stettler.

Charity and Relief

During the year 1929 this Department took action in giving the required relief to 948 cases, or a total of 1,807 individuals, including the members of families.

Relief was accounted for in the following manner:

Temporary relief	347	Temporary maintenance, Salvation Army Hostel	207
Permanent relief	155	Macleod Hospital	19
Transportation	97	Calgary Salvation Army	8
Deportation	11	Gleichen Eventide Home	70
Medical accounts paid	86	Bonnie Doon, Edmonton	37
Hospital accounts paid	119	House of Providence, Edmonton	8
Clothing	63	Lacombe Home, Midnapore	11
		Providence Hospital, Daysland	16

Relief was stopped in 222 cases.

The Alberta Provincial Police reported on 967 investigations made for and on behalf of the Department.

The Department received applications and was notified of over 250 cases of destitution requiring assistance, which were referred to the municipal authorities responsible for their maintenance.

Approximately 936 personal applicants were interviewed during the year at the relief office.

Division of Social Hygiene

(Harold Orr, O.B.E., M.B., D.P.H., *Director*)

Owing to the fact that agriculture is the chief occupation of the people of Alberta, the centres of population are not large, Edmonton and Calgary each containing approximately 70,000 persons. The total population of the Province is 633,000, and of this number some 13,000 are native Indians who are isolated on Indian reserves. The Province is 750 miles in length, and its width varies from 180 miles at the southern boundary to a maximum of 400 miles at the northern boundary, and contains 255,285 square miles of territory. It is, therefore, evident that the Province is comparatively sparsely settled. As a result of this we have a smaller proportion of venereal cases than in more densely settled countries such as those of Europe, but the difficulties in the problem of control are correspondingly increased.

It is usually stated by those best able to judge that about 10% of the urban population of Great Britain is syphilitic. These figures correspond to those arrived at by the Royal Commission on Venereal Disease in 1914. In the insane population the proportion of syphilitics is 20%. There is, therefore, twice as much syphilis in the insane population as in the normal population. We have found in Alberta that only 7% of our insane population is syphilitic, and we, therefore, assumed that only about 3½% of our population is syphilitic, or about one-third the proportion that exists in European countries.

Education and Publicity

Much of the publicity work undertaken with a view to moulding public opinion is done by the Canadian Social Hygiene Council, of which there are local branches in the Province, and two paid secretaries. This organization receives a small grant from the Provincial Government, and its activities vary from time to time, but on the whole it has done, and is doing, very useful work.

We possess a library of self-explanatory films on social hygiene which do not require the services of a special lecturer. These have been shown by the Department of Extension of the University of Alberta in all parts of the Province. In addition to this, we have maintained during the past four years a full-time lecturer, who has thoroughly covered the whole Province in his lecture tours. In this way our population has become more or less familiar with this question in its various phases.

Treatment

We have established well-equipped clinics in Edmonton, Calgary, Medicine Hat and Lethbridge. These clinics are free and open to all, regardless of their ability to pay. Most of our country cases are

able to attend one or another of these clinics, but we have to deal with the problem of the treatment of poor people living in remote parts of the country. These patients, so long as they are infectious, are treated by their local doctor, at the Government's expense, until such time as they become non-infectious, after which we supply all the medicines free of charge, but the doctor's fee for administering them must be paid by the municipality in which the patient resides.

Our treatment varies, of course, with the type of case. For recently acquired syphilis with a negative Wassermann, Neoarsphenamine is given intravenously on three successive days and then at weekly intervals until the first course of seven has been completed. At the same time, bismuth metal is given intromuscularly every five to seven days, and this is continued until from fifteen to twenty doses have been given. This is followed by a short course of mercury in the form of Hutchinson's pills, and then after a brief rest the combined course of neoarsphenamine and bismuth is repeated, and usually a third course is given. If the blood Wasserman test, which is taken at every second intravenous treatment, has been consistently negative throughout, and if after the third course of treatment the spinal fluid is normal, the patient is regarded as cured.

The use of mercury in the form of Hutchinson's pills suits our purpose admirably, as a patient is thus enabled to return to his home for intervals between the courses of neoarsphenamine and bismuth.

In early Wasserman positive syphilis, treatment is given along the same lines, but it is not so intensive, and of course the patient is kept under observation indefinitely.

Patients with cardiovascular syphilis are given a course of bismuth and potassium iodide before any neoarsphenamine is given.

For cerebro-spinal syphilis we use Tryparsamide instead of neoarsphenamine.

For paresis we have for the past six years been using the malaria induced pyrexia treatment. This work, which was inaugurated by this Branch in one of the Edmonton hospitals in 1924, was immediately transferred to the Provincial Mental Hospital, Ponoka, where, under the able direction of Dr. Cook, more than one hundred patients have been treated with about 35% of clinical cures. The treatment of these patients after discharge is continued for long periods of time with tryparsamide and bismuth.

In well established syphilis we have always hesitated to discharge any patient as cured, even though the blood Wasserman may have become negative, and the spinal fluid normal, and we have these patients continue to report back at least once a year for re-examination.

Our neoarsphenamine medication is controlled by liver function tests. During the last three years we have been doing the Van den Bergh test as a routine at every second treatment. We are thus able to detect liver damage before it becomes evident clinically, and to check it by the use of sodium thiosulphate intravenously. Since this control test has been used as a routine we have had no cases of acute yellow atrophy of the liver, or exfoliative dermatitis.

Gonorrhoea is treated according to the requirements of the case. We follow the usual practice of treatment with through and through irrigations of potassium permanganate solution, plus any special procedures which may be indicated in any particular case.

We have special machinery for dealing with special classes of the community. For example, all persons who are arrested on certain specified charges (which include all charges in any way associated with prostitution) must be examined for venereal disease. Any person found to be infected with venereal disease must be detained until he or she becomes non-infectious, and this detention and treatment becomes effective whether or no the person is found to be guilty of the charge on which he or she was arrested.

Then, of course, all inmates of our various governmental institutions, such as gaols and mental hospitals, are examined on admission and any infected individuals treated.

An important part of the venereal disease control is the follow-up work. In our clinics a careful social history is taken of each case, and an effort made to deal with the source of infection.

Although we have the power to make an examination of a suspected individual, it is very rarely necessary to use it. Our policy is to have the suspected individual interviewed by the social worker, and with very few exceptions the patient voluntarily comes to the clinic for examination and treatment.

Every clinic, of course, has to deal with the problem of persons discontinuing treatment before being cured. Our troubles with regard to this, however, have been surprisingly few, and I think that our extensive educational work has been an important factor in this respect.

The following figures briefly indicate the treatment work done during the year::

EDMONTON CLINIC, 9912 103rd Avenue.

Number of Patients		449
Sexes of Patients: Male	357	
Female	92	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	100	257	.....	357
Female	41	51	.....	92
Totals	141	308	.....	449

Number and results of Wasserman tests: 1763 tests, of which 423 were positive.

CALGARY CLINIC, City Hall Annex, New Police Building.

Number of Patients		626
Sexes of Patients: Male	540	
Female	86	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	105	408	27	540
Female	28	58	.....	86
Totals	133	466	27	626

Number and results of Wasserman Tests: 1135 tests, of which 202 were positive.

MEDICINE HAT CLINIC, General Hospital.

Number of Patients		29
Sexes of Patients: Male	21	
Female	8	

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	6	14	1	21
Female	4	4	.....	8
Totals	10	18	1	29

Number and results of Wasserman Tests: 88 tests, of which 43 were positive.

LETHBRIDGE CLINIC, Galt Hospital.

Number of Patients 50
Sexes of Patients: Male 48
Female 2

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	13	35	.....	48
Female	1	1	.....	2
Totals	14	36	.....	50

Number and results of Wasserman Tests: 56 tests, of which 7 were positive.

LETHBRIDGE GAOL, Lethbridge.

Number of Patients 53
Sexes of Patients: Male 53

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	35	16	2	53

Number and results of Wasserman Tests: 666 tests, of which 39 were positive.

FORT SASKATCHEWAN GAOL, Fort Saskatchewan

Number of Patients 150
Sexes of Patients: Male 76
Female 74

CLASSIFICATION OF THEIR DISEASES

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Adult: Male	49	27	.....	76
Female	38	36	.....	74
Totals	87	63	.....	150

Number and results of Wasserman Tests: 1127 tests, of which 153 were positive.

CASES REPORTED BY DOCTORS IN THE PROVINCE.

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	35	80	1	116
Female	20	15	.....	35
Totals	55	95	1	151

RECAPITULATION.

	Syphilis.	Gonorrhoea.	Chancroid.	Totals.
Male	343	837	31	1211
Female	132	165	.....	297
Totals	475	1002	31	1508

Dental Report

(A. E. Heacock, L.D.S., D.D.S., *Dentist*)

In the institutions under the Department the need for dental treatment has been steadily increasing. To meet this need, Dr. Sneddon was appointed full time dental officer at the Provincial Mental Hospital, Ponoka.

The work in the other institutions, viz., the Provincial Mental Institute, Oliver, the Provincial Training School, Red Deer, and the Central Alberta Sanatorium, Calgary, has been carried on as formerly. Dr. Kemp gave part time service during the summer at the Central Alberta Sanatorium.

The patients in the special hospital were inspected twice during the year and the necessary treatment carried out.

The travelling clinic operated from May 26th until November 10th. Dr. Gilchrist was appointed to the dental staff for the summer until it became necessary to resume his duties at the University on October 1st. Dr. Kemp carried on for the remainder of the itinerary.

During November Dr. Harry Thompson, field secretary of the Canadian Dental Hygiene Council, was in the province organizing a mouth health campaign to be put on early in the new year. The most enthusiastic support and assistance was given by the Department, the Medical Association, the Alberta Dental Association, the members of the dental profession, and various organizations in the Province. The campaign proved an unqualified success from every point of view.

A summary of the work carried out by this Branch appears in the report of each institution and in the report of the Nursing Branch.

Central Alberta Sanatorium, Calgary

(A. H. Baker, M.D., *Medical Superintendent*)

On June 21st the sanatorium accommodation was increased by twenty-two beds. The total institutional capacity stands at 210 beds, which appears to be the maximum without further building.

The total patient days exceeded those of 1928 by 2087, and the average patient day strength was 185.2. Four hundred and eleven patients received institutional treatment. The per diem cost was $2.92, which included not only the institutional cost, but also that of the follow-up department.

The follow-up work was continued along lines similar to those of the preceding year. Bi-monthly clinics were held in Edmonton and weekly clinics both in Calgary and at the Sanatorium. Five days were spent in Lethbridge, ten days in Medicine Hat, four days in Drumheller, and a number of trips were made to other towns of the Province. Total examinations made were 1323. This effort affords an opportunity of supervising to some extent the ex-patient, and at the same time helps in the discovery of new cases.

The annual Christmas seal sale, which is sponsored by the Canadian Tuberculosis Association, has been again carried on by various voluntary organizations in several of the larger centres. The funds so accumulated have been spent in promoting anti-tuberculosis and general health projects in these various communities, such as clinics, full time tuberculosis nurses, school surveys, and assisting individual cases. The Department of Health, through the sanatorium, has been pleased to furnish examining physicians and to assist in the work. Great credit is due to these organizations for carrying on this very effective and definite anti-tuberculosis campaign.

A winter course of lectures on tuberculosis was given to the nursing staff by the matron and medical superintendent. Seven different organizations were addressed in the interests of tuberculosis work in the Province.

The need for more sanatorium beds is still a pressing one and becomes more and more urgent. Comparison of the death rates of the provinces of Canada, during the past nine years, as compiled by the Dominion Bureau of Statistics, suggests that the death rate in Saskatchewan and Quebec has remained about constant. In Manitoba, Ontario, New Brunswick, Nova Scotia and Prince Edward Island there has been some decrease, while in Alberta and British Columbia the rate has apparently increased. While this period of observation is short, the information offered is at least suggestive. If these nine years can be accepted as expressing the present tendency in tuberculosis mortality in Alberta, it is apparent that we have an increasing problem.

The following table emphasizes very strikingly the unfortunate position of this Province as regards available sanatorium beds:

SANATORIUM BEDS IN CANADA

	Occupied Beds	Beds under construction	Beds financed	Population to each occupied bed
Prince Edward Island	.....	50	.....	.....
Nova Scotia	321	.....	100	1715
New Brunswick	312	.....	100	1344
Quebec	1585	.....	455	1697
Ontario	2323	.....	.....	1408
Manitoba	385	200	100	1723
Saskatchewan	680	.....	.....	1275
Alberta	210	.....	.....	3076
British Columbia	470	.....	.....	1257

The above statistics are taken from a report submitted by Dr. R. E. Wodehouse, executive secretary, Canadian Tuberculosis Association, at the British Medical Association, Winnipeg, August 29th, 1930.

In order that we might have Manitoba's present accommodation, which is next lowest to our own, Alberta should have an additional 164 beds. We would then have the lowest rate of all the provinces with the exception of Prince Edward Island, for Manitoba has under construction at present an additional 200 beds.

May I again point out that tuberculosis is an infectious disease, and as such it requires in a Province like ours institutional treatment in a great many cases if the spread is to be controlled. At present many houses, entirely unsuited for the safe treatment of this disease, are compelled to house infectious cases during weeks and months because of insufficient sanatorium beds. Quite apart from the argument from the public health standpoint, is the humanitarian one, that in frequent instances unnecessary suffering is caused the sick through lack of care. Cases that might respond to treatment may be unable to get this until such time as the treatment is ineffectual or much prolonged.

The satisfactory care of the tuberculous at home presupposes ample, efficient and regular supervision by visiting nurses and physicians, if preventive measures are to be maintained. This oversight is obviously impossible at present owing to the scattered population and the lack of visiting nurses and doctors. The result undoubtedly is the unnecessary passing on of this disease to other individuals. It would appear, therefore, that unless greater effort is put forth to cope with this disease, which appears to be on the increase, that we may expect to have in a decade or two a still larger problem on our hands in the number of those sick and unable to maintain themselves.

I submit that our immediate objective should be at least one tuberculosis bed for every annual death from this disease, which, on the basis of the 1929 returns, would mean 391 beds, an increase of 180 over our present state.

In this connection the care of tuberculous children should not be overlooked. It may be mentioned that there are no sanatorium beds available for the satisfactory care of tuberculous children. An attempt to remedy this situation might quite naturally be included in any building program.

Parallelling the need of beds for patients is the very real necessity at the Central Alberta Sanatorium of a nurses' and maids' home. At present overcrowding exists which is not conducive to health or happiness. It must be borne in mind that those who spend their days taking care of patients in all stages of tuberculosis require reasonably hygienic living conditions, if they are to avoid disease and to enjoy, at the same time, that degree of contentment so essential in the proper care of the sick. It is quite impossible to supply quarters to more nurses without additional room.

The value of the service performed by the tuberculosis nurses in some of the larger centres cannot be stressed too forcibly. Without them, the home care of the tuberculous patient is entirely unsatisfactory, while with such nursing supervision more cases can be effectively taken care of at home. It is hoped that before long it will be possible to have in operation a somewhat similar service in other parts of the Province.

Grateful acknowledgment is made of the many gifts and services of various sorts which have been generously given by friends interested in the sanatorium.

The sanatorium experienced a real loss in the death of the late Rev. Dr. Shearer, who for some time conducted divine services which were much appreciated by all. His work has been taken over by Rev. Capt. Mancaster. We are also indebted to the Rev. Father McDonald and the Rev. Dr. McQueen for comfort given the patients through regular visits and divine services.

The dental work has again been ably carried on by the monthly visits of Dr. Heacock.

Dr. E. M. Busby, who had been a faithful and efficient member of the staff for a number of years, resigned on May 1st to enter private practice. He was succeeded by Dr. L. M. Mullen.

CLASSIFICATION OF DISCHARGED PATIENTS, 1929

On Admission.		Total.		T.B.	Residence.		On Discharge.					
		No.	%	%	Not over 31 days.	Over 31 days.	A.	A.A.	Q.	I.	U.	D.
I. No disease		8	....	....	2	6	....	....	....	....	....	....
II. Undiagnosed		2	....	....	1	1	....	....	....	....	....	....
III. Non-T.B.		39	....	....	15	24	....	....	....	....	....	3
IV. T.B. inactive		8	....	....	3	5	....	....	....	....	....	....
Total		57	26.5	....	21	36	....	....	....	....	....	3
V. T.B. Pulmonary—												
1. Clinical (No bacilli found):												
Minimal	A.	12	....	....	....	12	....	3	4	3	2	....
	B.	....	....	....	....	....	....	....	....	....	....	....
	C.	....	....	....	....	....	....	....	....	....	....	....
Mod. Advanced	A.	16	....	....	....	16	....	2	9	2	3	....
	B.	3	....	....	....	3	....	....	....	....	2	1
	C.	....	....	....	....	....	....	....	....	....	....	....
Far Advanced	A.	1	....	....	....	1	....	....	....	1	....	....
	B.	1	....	....	....	1	....	....	....	1	....	....
	C.	1	....	....	....	1	....	....	....	....	....	1
Total		34	15.8	21.6	....	34	....	5	13	7	7	2
2. Positive (bacilli found):												
Minimal	A.	....	....	....	....	....	....	....	....	....	....	....
	B.	....	....	....	....	....	....	....	....	....	....	....
	C.	....	....	....	....	....	....	....	....	....	....	....
Mod. Advanced	A.	13	....	....	....	13	....	2	4	4	2	1
	B.	6	....	....	....	6	....	....	1	....	3	2
	C.	2	....	....	....	2	....	....	....	2	....	....
Far Advanced	A.	19	....	....	2	17	....	....	6	8	3	2
	B.	33	....	....	....	33	....	....	1	11	9	12
	C.	29	....	....	2	27	....	....	....	1	10	18
App. Hopeless		14	....	....	8	6	....	....	....	....	1	13
Total		116	54	73.4	12	104	....	2	12	26	28	48

On Admission.				Residence.		On Discharge.					
	No.	Total. %	T.B. %	Not over 31 days.	Over 31 days.	A.	A.A.	Q.	I.	U.	D.
Total Pul. T.B. (Active)	150	....	....	....	....	....	....	....	....	....	....
VI. T.B. Non–Pulmonary..	8	3.7	5	....	8	....	2	....	1	3	2
Grand Total.....	215	100	100	33	182	....	9	25	34	38	55

Explanation of Abbreviations and terms used.—The standard of classification is that of the National Tuberculosis Association. Minimal, Moderately Advanced and Far Advanced refer to anatomical extent of disease, while "A", "B", and "C" signify symptoms in order of increasing severity.

"A" Arrested; "A.A." Apparently Arrested; "Q" Quiescent; "I" Improved; "U" Unimproved; "D" Died.

N.B.—Only those in residence over 31 days are classed as treated.

TOTAL NUMBER OF PATIENT DAYS

D.P. and N.H.	3,395
Civilian	64,206
Total	67,601

INFIRMARY DAYS

D.P. and N.H.	2,255
Civilian	47,121
Total	49,376

	Military.	Civilian.	Total.
Patients in Sanatorium January 1, 1929	12	168	180
Patients treated during 1929	28	383	411
Remaining in Sanatorium January 1, 1930	5	191	196

CLASSIFICATION ON ADMISSION OF 215 DISCHARGED PATIENTS

No disease	8	Tuberculosis, inactive	8
Undiagnosed	2	Tuberculosis, pulmonary (active)	150
Non–tuberculous	39	Tuberculosis, non–pulmonary	8

CLASSIFICATION OF 150 "TREATED" CASES OF PULMONARY TUBERCULOSIS

On Admission.		On Discharge. Benefitted	Non–benefitted.	Died.
Minimal	12	10	2	0
Moderately Advanced	40	26	10	4
Far Advanced	84	29	22	33
Apparently Hopeless	14	0	1	13

DIAGNOSIS OF NON–TUBERCULOUS CASES

Acute respiratory infection	1	Osteomyelitis rt. femur	1
Bronchial asthma	1	Pleurisy	2
Bronchiectasis	3	Pulmonary abscess	1
Chronic bronchitis and emphysema..	3	Pulmonary fibrosis	4
Chronic otitis media	1	Rheumatic carditis	1
Colitis	1	Sarcoma right lung	1
Carcinoma of lung	3	Sinusitis	3
Debility	4	Teno–synovitis of hand	1
Empyema	4	Unresolved pneumonia	1
Hodgkin's disease	1	Upper respiratory infection	4

CLINICAL LABORATORY EXAMINATIONS

Sputum:		Urine	1477
In–Patients	2304	Blood	225
Out–Patients	193	Spinal fluid	4
Staff	20	Feces	4
Total	2517	Guinea pig inoculation	28
		Guinea pig autopsies	24
		Other examinations	141
		Total	1903

CLASSIFICATION OF OUT–PATIENTS

	Ex–Patients.	Contacts.	Others.	Total.
At Sanatorium	34	29	134	197
At Edmonton	76	49	164	289
At Calgary	20	126	130	276
Throughout Province	61	162	338	561
Total	191	366	766	1323

X–RAY REPORT

RADIOGRAPHIC:			
Chest	749	Hand	4
Abdomen	12	Foot	7
Spine	18	Hips and pelvis	10
Knees	9	Legs	3
Dental	23		
Sinus and antra	9	Total	846
Ankle	2		

FLUEROSCOPIC:

Chest: Gas cases	1072
Others	399
Gastro-intestinal	99
Total	1570

Seventeen patients were given the Gastro-intestinal series during the year.
Three patients were given Barium enema.

HELIOTHERAPY REPORT

	Treatments.	No. Patients.
Sun baths	1197	45
Air baths	5312	67
Laryngeal treatments	571	21
Pharyngeal treatments	126	10
Mercury quartz lamp treatments	7917	66

SUMMARY OF DENTAL WORK DONE

Patients examined	371	Fillings	102
Patients treated	241	Extractions	117
Prophylaxis	111	Plates	2

OPERATING ROOM REPORTS

Pneumothorax:

Under treatment Jan. 1, 1929	24	Injection Intravenous Ca. Cl. 2	85
New cases begun, 1929	32	Injection intravenous Saline and Glucose	11
Old cases recommenced, 1929	3	Injection intratracheally Lipiodol	9
Terminated during year	19	Injection into sinus Lipiodol	1
Under treatment Dec. 31, 1929	40	Paracentesis of abdomen	6
Pneumothorax refills	1278	Phrenic avulsion	2
Unsuccessfully attempted	15	Lumbar punctures	10
Total during year	59	Antrum punctures	1
Aspiration of pleural cavity	42	Venesection	1
Aspiration of pleural cavity with irrigation	187	Plaster casts, body	2
Rib resection	1	Plaster casts, leg	2
Aspiration of knee	12	Irrigation bladder	2
Incision into and drainage abscess breast	1	Examinations proctoscopic	1
Aspiration of other abscesses	11	Examinations cystoscopic	1
		Dressings and miscellaneous	95

CLASSIFICATION OF PATIENTS DISCHARGED IN 1929 (215)

I.—SEX:

Male	105
Female	110
Total	215

II.—SOCIAL:

Married	87
Single	122
Widows	3
Widowers	3
Total	215

III.—AGES:

Under 5 years	0	40 to 49 years	21
5 to 9 years	5	50 to 59 years	12
10 to 14 years	11	60 to 69 years	1
15 to 19 years	28		
20 to 29 years	76	Total	215
30 to 39 years	61		

IV.—RELIGIONS:

Adventist	1	Mennonite	1
Baptist	9	Presbyterian	32
Christian Reform	1	Roman Catholic	45
Church of England	47	Salvation Army	2
Greek Catholic	14	United	30
Greek Orthodox	3	Not known	6
Hebrew	1		
Latter Day Saints	1	Total	215
Lutheran	22		

V.—OCCUPATIONS (Women):

Housewife	54	Stenographer	4
Student	18	Milliner	1
Nurse, graduate	7	Telephone Operator	1
Nurse in training	5	Cook	1
Waitress	2	Laundry Worker	1
Teacher	3		
Maid	8	Total	110
None	5		

VI.—OCCUPATIONS (Men):

Airman	1	Manager	3
Butcher	1	Merchant	1
Bank Clerk	3	Market Master	1
Blacksmith	1	Mill Worker	2
Brewery Worker	1	None	1
Baker	2	Orderly	1
Clerk	6	Physician	1
Civil Servant	2	Railroad Clerk	1

Carpenter	2	Salesman	1
Confectioner	1	Student	8
Electrician	1	Teamster	1
Engineer	2	Teacher	1
Farmer	32	Telegrapher	1
Forester	1	Warehouseman	2
Lawyer	1	Watchman	1
Laborer	9	Waiter	1
Miner	8		
Machine inspector	2	Total	105
Mechanic	2		

VII.—NATIVITY:

Alberta	47	Lithuania	1
Austria	5	Newfoundland	1
Canada	50	Norway	7
Denmark	2	Russia	4
England	24	Roumania	3
Esthonia	1	Scotland	11
Galicia	1	Serbia	1
Holland	4	Sweden	3
Hungary	1	United States	27
India	1	Ukrainia	6
Ireland	12	Wales	1
Italy	1		
Jugo–Slavia	1	Total	215

VIII.—LENGTH OF RESIDENCE IN ALBERTA AT TIME OF ADMISSION:

Under one year	15	Twenty to twenty–four years	19
One year	6	Twenty–five to twenty–nine years	9
Two years	7	Thirty to forty–five years	2
Three years	9	No record	3
Four years	1	Born in Alberta	47
Five to nine years	19		
Ten to fourteen years	31	Total	215
Fifteen to nineteen years	47		

IX.—RACIAL ORIGIN:

Austrian	6	Italian	1
Breed	5	Indian	3
Bohemian	1	Greek	1
Czecho–Slovakian	1	Lettish	1
Dane	4	Lithuanian	1
Dutch	6	Norwegian	15
English	46	Russian	2
Esthonian	1	Roumanian	4
Finn	1	Scotch	39
French	11	Swedish	3
German	9	Turkish	1
Galician	1	Ukrainian	13
Hebrew	1	Unknown	7
Hungarian	1		
Irish	30	Total	215

RESIDENCE OF PATIENTS

CITIES:

Calgary	42	Medicine Hat	4
Edmonton	45	Wetaskiwin	2
Lethbridge	2		

TOWNS:

Big Valley	1	Innisfail	1
Camrose	1	Leduc	1
Cardston	1	Macleod	1
Didsbury	1	Peace River	2
Drumheller	1	Red Deer	1
Edson	1	Strathmore	1
Gleichen	1	Taber	1
Grande Prairie	1	Vegreville	2
High River	2	Vulcan	1

VILLAGES:

Alliance	1	Lamont	1
Irma	1	Lac La Biche	1
Heisler	1	Smoky Lake	1
Coalhurst	2		

MUNICIPAL DISTRICTS:

No. 40 Castle River	1	425 Sterling	1
94 Bow Island	1	427 Evergreen	1
128 Harmony	1	460 Columbia	1
129 Clear Lake	1	483 Melberta	1
189 Dinton	1	484 Birch Lake	1
219 Bow Valley	2	486 Beaver Lake	1
220 Shepard	2	517 Clover Bar	2
221 Springbank	1	489 Liberty	1
244 Rose Lynn	1	512 Ethelwyn	2
250 Beddington	1	513 Ukrainia	3

277	Michichi	2	515	Norma	3
278	Carbon	6	516	The Pines	1
279	Norquay	1	519	Spruce Grove	1
306	Lambton	1	543	Laurier	1
312	Waterloo	1	544	Champlain	1
339	Pine Lake	1	545	Eagle	3
341	Poplar Grove	1	549	Ray	1
371	Golden West	2	550	Woodford	1
397	Lakeside	1	552	Pembina	1
398	Lamerton	1	739	Grande Prairie	1
400	Lorne	2	740	Bear Lake	1

LOCAL IMPROVEMENT DISTRICTS:

No.	2	1	497		1
	67	1	528		1
	71	2	640		1
	151	1	771		1
	152	2	796		1
	212	2	No residence		8
	247	2	Non–residents of Alberta		5
	400	1			
	491	1	Total		215

Provincial Mental Hospital, Ponoka

(E. H. Cooke, M.D., *Medical Superintendent*)

On the first day of January, 1929, there were in residence 1,055 patients, 602 males and 453 females. At the close of the year there were 1,086 patients, 608 males and 478 females, an apparent increase of only 31, but allowance must be made for the 65 male patients who were transferred to Oliver and the 3 male patients received from that institution. (See table summarizing movements of patients.)

The total admissions, including 6 observation cases, were 362, viz., 244 males and 118 females, as compared with 366 in 1928.

It is gratifying to note that there is a steady increase in the number of voluntary admissions, 18 or 5%, and those by two medical certificates, 43 or 11.8%, as compared with 3% and 6.55% respectively in 1928.

In March, Section 22 of The Mental Diseases Act was amended permitting the medical superintendent to grant leave of absence for a period not exceeding 3 days to patients who were not otherwise ready for discharge. This provision was made use of and greatly appreciated by patients and their friends.

The total discharges were 212, viz., 132 males and 80 females, as follows:

	Male.	Female.	Total.
Recovered	57	34	91
Improved	54	31	85
Not improved	13	3	16
Not insane	8	12	20
Total	132	80	212

These discharges include 178 probations (102 males and 76 females), of whom 30 were returned, 6 cases for observation, and 28 deportations to the following countries:

	Male.	Female.	Total.
Denmark	5	....	5
England	1	1	2
Hungary	1	....	1
Jugo-Slavia	1	....	1
Norway	4	....	4
Poland	6	1	7
Roumania	2	....	2
Scotland	1	1	2
Sweden	1	....	1
U.S.A.	1	....	1
Lithuania	....	1	1
Czecho-Slovakia	1	....	1
Totals	24	4	28

The total discharge rate was 58.5% of the admissions, as against 59.2% for 1928.

The recovery rate, based on the admissions for the year(less those not insane), is for both sexes 27.4% (males 25.3%, female 31.7%).

The deaths were 74, viz., 46 males and 28 females.

The death rate, based on the total number under treatment and observation (1,417), is for the males 5.4% and for the females 4.9%, or for both sexes 5.2%.

There were 2 deaths from cerebral tumour (both females), 2 from cancer (1 male and 1 female), 8 from pulmonary tuberculosis, and 12 from general paralysis. Four of these last followed on malarial inoculation, the remainder succumbed from causes incidental to the advanced stages of general paralysis.

Malarial inoculation followed by an intensive course of ordinary anti-syphilitic treatment is still the most satisfactory means of combating this otherwise intractable disease. By the end of the year a total of 128 cases had been so treated. Forty-five (or 35%) improved to such an extent that they were discharged to their homes, and it is known that several of these have been an economic success. Only one case has been returned of those discharged since this method of treatment was commenced in September, 1924.

It will be noted from Table 12 that over 50% of the cases admitted during the year fell within the manic-depressive-schizophrenic-paranoid groups, approximately the same percentage as in preceding years.

Among the admissions there were 36 general paralytics (32 males and 4 females), 12 drug addicts (7 males and 5 females), 6 alcoholics with psychoses (5 males and 1 female), and 1 male chronic alcoholic without psychosis, 6 suffering from the sequelae of encephalitis lethargica, and 22 mental defectives (16 with psychoses and 6 without).

A history of insane or defective heredity was obtained in 130 of the 362 admissions, i.e., in 35.8%.

Table 8 indicates that the heaviest incidence of the psychoses was between the ages of 30 and 40.

The table of nativities shows that 31.7% were born in Canada, 20.3% in the British Isles, 15% in the U.S.A., 14.9% in the Central European countries, and 5.8% were of Scandinavian origin.

The sexual sterilization of three cases (1 male and 2 females) was authorized by the Eugenics Board, and the first operation under the Act was performed at the University Hospital, Edmonton, on or about May 3rd, a second towards the end of the year at the same hospital, but the third was postponed until early in the present year. Two meetings of the board were held during the year.

With the exception of 10 cases of diphtheria amongst the nursing staff and patients on the female side, the health of the hospital as a whole was good.

The following changes took place in the medical staff: On January 1st Dr. John J. Bowlen was appointed as temporary medical officer, but resigned on May 31st to continue his surgical work in the United States. Dr. Bowlen was particularly interested in operative surgery, and did a considerable amount of useful work along that line whilst he was on our staff. Dr. D. L. McCullough returned from England on January 19th after a year's leave of absence, having obtained the diploma in Psychological Medicine of the Royal College of Surgeons and Physicians of England. Dr. Chas. P. Fitzpatrick was appointed medical superintendent of the

Provincial Mental Institute, Oliver, and began his duties there on June 1st. Mr. Ivar Lefsrud and Mr. Ernest Hay Watts, fifth year medical students in the University of Alberta, were appointed medical internes during the summer months, May to September. On July 15th Dr. Sylvester M. Sneddon began his duties as resident dentist, his work being entirely confined to the patients of this hospital. On September 30th Dr. Frank Ford Tallman, assistant medical officer, who was in charge of the female side, resigned, and is now employed at King's Park State Hospital, Long Island, New York. On December 11th Dr. David Christie was appointed medical officer to fill the vacancy caused by Dr. Tallman's resignation.

The following are the more important constructions and alterations during the year: The new farm dormitory building was completed and occupied on May 6th. There is accommodation for 40 patients and 16 employees. An up-to-date kitchen is one of the features of the building, and the patients appear to be well pleased with the living conditions there.

In the space between this building and the farm manager's cottage there were three new constructions: A creamery provided with a pasteurizer and cooling apparatus for the milk, a cottage for the herdsman and one for the engineer in charge of the furnace at the farm dormitory.

Construction was begun on the new reception building for male patients, a building for the chronically disturbed male patients, including a wing for the male tuberculous; and a new wing for the nurses' home which, when completed, will about double the accommodation for nurses.

Besides the routine repairs to furniture, beds, etc., the occupational carpenter and his group of patients, averaging about 16, made alterations to the poultry farm, erected a steel wire fence around the women's airing court, and improved the root-house between the barns.

TABLE SHOWING MOVEMENT OF PATIENTS DURING 1929

	Male.	Female.	Total.
In residence January 1st, 1929	603	453	1055
INCOMING			
Admissions:			
Voluntary	15	3	
By 2 medical certificates	23	20	
By warrant	195	93	
Admitted for observation	6	....	
By order of Minister of Health	5	2	
	—	—	362
Returned from probation	13	17	
Eloped and returned	24	....	
Returned from leave of absence	3	1	
Returned from Oliver	3	....	
Returned from University Hospital	1	....	
Returned from Eventide Home	1	....	
	—	—	63
			1480
OUTGOING			
Probations	102	76	
Deportations	24	4	
Granted leave of absence	3	2	
Transferred to Oliver	65	....	
Transferred to University Hospital	2	1	
Transferred to Eventide Home	1	....	
Observation cases disposed of	6	....	
Eloped	34	....	
Deaths	46	28	
	—	—	394

Total in residence Dec. 31, 1929	608	478	1086
Total in residence Dec. 31, 1928	602	453	1055
Increase in residents	6	25	31

TABLE No. 1

SHOWING THE NUMBER OF ADMISSIONS, DISCHARGES AND DEATHS DURING 1929

Month.	Admissions			Discharges			Deaths		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
January	13	10	23	10	4	14	4	3	7
February	16	7	23	10	4	14	4	2	6
March	26	5	31	11	7	18	3	3	6
April	15	16	31	15	5	20	3	3	6
May	19	6	25	13	6	19	9	5	14
June	23	12	35	8	13	21	4	1	5
July	31	3	34	12	10	22	4	2	6
August	24	11	35	9	10	19	4	2	6
September	14	8	22	7	11	18	3	1	4
October	19	17	36	10	4	14	2	2	4
November	22	12	34	12	3	15	4	3	7
December	22	11	33	15	3	18	2	1	3
Total	244	118	362	132	80	212	46	28	74

TABLE No. 2

SHOWING THE CIVIL STATE OF PATIENTS ADMITTED DURING 1929

Civil State.	Male.	Female.	Total.
Single	130	20	150
Married	92	83	175
Widowed	18	13	31
Divorced	4	2	6
Total	244	118	362

TABLE No. 3

SHOWING THE RELIGIOUS DENOMINATION OF THOSE ADMITTED DURING 1929.

Religious Denomination.	Male.	Female	Total.
Anglican	37	19	56
Baptist	13	6	19
Christian Church	2	....	2
Church of Ireland	3	....	3
Confucian	1	....	1
Dutch Reformed Church	....	1	1
Evangelical	1	....	1
Greek Catholic	16	5	21
Jewish	4	....	4
Latter Day Saints	3	2	5
Lutheran	33	14	47
Mormon	1	1	2
Other Protestants	7	5	12
Pentecostal	1	....	1
Plymouth Brethren	1	1	2
Presbyterians	26	9	35
Roman Catholic	57	35	92
Salvation Army	2	....	2
Seventh Day Adventist	1	1	2
Unitarian	....	1	1
United Church	35	18	53
Total	244	118	362

TABLE No. 4

SHOWING THE DEGREE OF EDUCATION OF THOSE ADMITTED DURING 1929

Degree of Education.	Male.	Female	Total.
Superior	10	1	11
Common School	226	111	337
None	8	6	14
Total	244	118	362

TABLE No. 5

SHOWING THE NATIONALITY OF THOSE ADMITTED DURING 1929

Nationality.	Male.	Female.	Total.	Nationality.	Male.	Female.	Total.
Austria	7	2	9	Newfoundland	2	....	2
Belgium	2	1	3	Norway	4	2	6
Canada	83	32	115	Old Mexico	1	....	1
China	1	....	1	Poland	14	4	18
Czecho–Slovakia	3	1	4	Russia	6	6	12
Denmark	6	....	6	Roumania	5	....	5
England	34	22	56	Scotland	10	6	16
Finland	1	....	1	Spain	....	1	1
France	2	....	2	Sweden	6	2	8
Germany	8	2	10	Switzerland	....	2	2
Holland	1	1	2	Ukrainia	2	....	2
Hungary	2	....	2	U.S.A.	27	29	56
Ireland	11	....	11	Wales	2	....	2
Italy	2	3	5	West Indies	....	1	1
Jugo–Slavia	1	....	1				
Lithuania	1	....	1	Total	244	118	362
Luxemburg	....	1	1				

TABLE No. 6

PLACE OF RESIDENCE AT TIME OF COMMITTAL, 1929

Place.	Male.	Female.	Total.	Place.	Male.	Female.	Total.
Acadia Valley	....	1	1	Galahad	....	1	1
Acme	1	....	1	Gleichen	4	....	4
Aklavik, N.W.T.	1	....	1	Glen Leslie	....	1	1
Alix	....	1	1	Goldspring	....	1	1
Ankerton	1	....	1	Grande Prairie	....	2	2
Artland, Sask.	1	....	1	Granum	1	....	1
Athabasca	1	....	1	Halcourt	1	....	1
Bashaw	1	....	1	Halkirk	....	1	1
Bawlf	1	....	1	Hay Lake	3	2	5
Beddington	1	....	1	Heldar	1	....	1
Beiseker	....	1	1	Hilda	1	....	1
Bellshill	....	1	1	Hillcrest	....	1	1
Bellevue	1	....	1	Hines Creek	1	....	1
Big Valley	2	....	2	Hobbema	....	1	1
Bilby	1	....	1	Homeglen	....	1	1
Blairmore	1	1	2	Hoselaw	1	....	1
Bon Accord	....	1	1	Hythe	1	....	1
Bowden	1	....	1	Iron Springs	1	....	1
Bow Island	....	1	1	Irvine	1	....	1
Breton	....	1	1	Jasper	1	....	1
Brooks	1	....	1	Keg River, N.W.T.	....	1	1
Bulwark	1	....	1	Killam	2	....	2
Byemoor	....	1	1	Kingman	1	....	1
Calgary	34	23	57	Kinmundy	1	....	1
Camrose	1	....	1	Kinsella	....	1	1
Carbon	....	1	1	Kracow	1	....	1
Carvel	....	1	1	Lake Isle	....	1	1
Carstairs	2	1	3	Lamont	1	....	1
Chauvin	1	....	1	Leedale	1	....	1
Cheadle	1	....	1	Lavoy	1	....	1
Chipman	....	1	1	Lessard	1	....	1
Clandonald	1	....	1	Lethbridge	5	1	6
Clive	1	....	1	Luscar	1	....	1
Cold Lake	2	....	2	Macleod	1	....	1
Coleman	2	....	2	Mannville	....	1	1
Cooking Lake	....	1	1	Mayerthorpe	....	1	1
Coronation	1	....	1	Markerville	....	1	1
Coalhurst	1	1	2	McLaughlin	1	1	2
Craigmyle	1	....	1	Medicine Hat	2	2	4
Crossfield	1	1	2	Millet	2	....	2
Darling	....	1	1	Millicent	1	....	1
Daysland	....	1	1	Minburn	1	....	1
Deaver	....	1	1	Mirror	....	1	1
Dewberry	1	....	1	Monarch	1	1	2
De Winton	1	....	1	Monitor	1	....	1
Didsbury	1	....	1	Moon Lake	....	1	1
Dinant	1	....	1	Morecambe	1	....	1
Drumheller	4	....	4	Mundare	1	1	2
Duchess	....	1	1	Nanton	....	1	1
Duffield	3	....	3	Neerlandia	1	....	1
Dunmore	2	....	2	New Dayton	....	1	1
Edmonton	56	21	77	New Norway	....	1	1
Edgerton	....	1	1	Nordegg	2	....	2
Ellerslie	....	1	1	Olds	2	....	2
Edson	2	....	2	Orion	1	1	2
Evansburg	1	....	1	Pashley	1	....	1
Fallis	1	1	2	Peace River	1	....	1
Faust	1	....	1	Peavine	1	....	1
Fort McMurray	....	1	1	Peers	....	1	1
Foisy	....	1	1	Penhold	1	1	2
Fort Saskatchewan	2	....	2	Pincher Creek	2	....	2
Fort Simpson	1	....	1	Plain Lake	1	....	1
Gadsby	1	....	1	Ponoka	1	1	2

Place.	Male.	Female.	Total.	Place.	Male.	Female.	Total.
Radnor	1	....	1	Taber	1	....	1
Ranfurly	1	....	1	Thelma	....	1	1
Red Deer	3	1	4	Tofield	2	....	2
Retlaw	....	1	1	Three Hills	....	1	1
Rimbey	....	2	2	Two Hills	1	....	1
Rochfort Bridge	1	....	1	Valhalla Centre	1	....	1
Rockyford	1	....	1	Vancouver, B.C.	1	....	1
Rocky Mtn. House	....	1	1	Vegreville	1	....	1
Rocky Rapids	1	....	1	Vermilion	....	1	1
Rossington	1	....	1	Veteran	1	....	1
Ryley	1	....	1	Vilna	1	....	1
St. Albert	2	....	2	Vulcan	1	....	1
St. Paul	1	....	1	Wabamun	1	....	1
Salem, Oregon	1	....	1	Waskatenau	1	....	1
Star	1	....	1	Wayne	1	1	2
Stavely	3	....	3	Westlock	3	....	3
Seven Persons	....	1	1	West Wingham	....	1	1
Sexsmith	1	....	1	Wetaskiwin	1	3	4
Smoky Lake	1	1	2	Whitecourt	1	....	1
Spring Lake	1	....	1	Whitelaw	....	1	1
Standard	1	....	1	Youngstown	1	....	1
Stettler	....	1	1				
Stewartfield	1	....	1	Total	244	118	362
Streamstown	1	....	1				

TABLE No. 7

SHOWING THE OCCUPATION OF THOSE ADMITTED DURING 1929

Occupation.	Male.	Female.	Total.	Occupation.	Male.	Female.	Total.
Accountant	2	....	2	Miner	10	....	10
Baker	1	....	1	Mill–hand	1	....	1
Barrister	1	....	1	Motor mechanic	1	....	1
Blacksmith	1	....	1	Night watchman	1	....	1
Brewery Worker	1	....	1	None	1	....	1
Bricklayer	1	....	1	Oil Speculator	1	....	1
Bridge Builder	1	....	1	Painter	1	....	1
Carpenter	1	....	1	Piano tuner	1	....	1
Clerk	4	....	4	Postal clerk	1	....	1
Coal Trimmer	1	....	1	Real estate agent	1	....	1
Cook	5	....	5	Picture framer	1	....	1
Constr. foreman	1	....	1	Salesman	6	....	6
Domestic	....	6	6	Seamstress	....	1	1
Dressmaker	....	2	2	Section foreman	1	....	1
Engineer—				Section man	2	....	2
Electric	1	....	1	Schoolgirl	....	1	1
Locomotive	....	....	....	Soldier	1	....	1
Steam	2	....	2	School Teacher	1	....	1
Farmer	86	....	86	Stenographer	....	1	1
Fireman	1	....	1	Storekeeper	1	....	1
Forest Ranger	1	....	1	Taxi–driver	1	....	1
Glazier	1	....	1	Tinsmith	1	....	1
Home	6	9	15	Treaty Indian	1	....	1
Housekeeper	....	8	8	Trapper	2	....	2
Housewife	....	87	87	Theological student	1	....	1
Interior decorator	1	....	1	Waitress	....	3	3
Labourer	86	....	86				
Machine shop hlpr.	1	....	1	Total	244	118	362

TABLE No. 8

SHOWING THE AGES OF THOSE ADMITTED DURING 1929

Ages.	Male.	Female.	Total.	Ages.	Male.	Female.	Total.
10 to 15	....	1	1	55 to 60	13	3	16
15 to 20	11	7	18	60 to 65	9	2	11
20 to 25	20	12	32	65 to 70	4	5	9
25 to 30	25	17	42	70 to 75	8	1	9
30 to 35	31	22	53	75 to 80	4	1	5
35 to 40	36	16	52	80 to 85	2	....	2
40 to 45	29	10	39				
45 to 50	30	14	44	Total	244	118	362
50 to 55	22	7	29				

TABLE No. 9

SHOWING STATISTICS OF HEREDITY IN THOSE ADMITTED DURING 1929

Heredity.	Male.	Female.	Total.
Paternal Branch	34	14	48
Maternal Branch	19	17	36
Paternal or Maternal	17	19	36
Paternal and Maternal	8	2	10
Said not to be Heredity	131	58	189
History insufficient	35	8	43
Total	244	118	362

TABLE No. 10

SHOWING THE ALLEGED CAUSES OF THE ATTACK OF INSANITY, 1929

Alleged Causes.	Male.	Female.	Total.
Alcohol	25	2	27
Anaemia	1	....	1
Brain tumour	....	1	1
Cardio–vascular degeneration	17	5	22
Child–bearing	....	1	1
Child–birth	....	8	8
Constitutional psychopathic inferiority	2	1	3
Deaf–mutism	1	....	1
Drug addiction	8	3	11
Encephalitis lethargica	4	3	7
Epilepsy	7	5	12
Goitre	1	1	2
Heredity	50	33	83
Heredity, alcoholic	21	12	33
Heredity, epileptic	9	2	11
Heredity, suspected	9	8	17
Ill–health	12	11	23
Injury to head	2	1	3
Injury to other parts	5	....	5
Influenza	....	4	4
Isolation	4	2	6
Menopause	....	9	9
Mental deficiency	14	13	27
Mental stress, acute	3	5	8
Mental stress, prolonged	22	23	45
Not known	37	10	47
Overwork	7	7	14
Pregnancy	....	6	6
Prolonged lactation	....	2	2
Pyorrhoea	6	1	7
Senility	5	2	7
Syphilis	35	6	41
Temperament, cycloid	7	14	21
Temperament, schizoid	16	13	29
Temperament, paranoid	14	1	15
Pulmonary tuberculosis	....	2	2
Total	244	118	362

TABLE No. 11

SHOWING THE STATE OF BODILY HEALTH ON ADMISSION DURING 1929

Bodily Condition.	Male.	Female.	Total.
In average bodily health	190	81	271
In reduced health	47	30	77
In greatly reduced health	7	7	14
Total	244	118	362

TABLE No. 12

SHOWING THE FORM OF MENTAL DISORDER IN THOSE ADMITTED DURING 1929

Form of Disorder.	Male.	Female.	Total.
SENILE PSYCHOSES:			
Simple deterioration	3	2	5
Presbyophrenic type	1	....	1
Delirious and confused states	....	1	1
PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS	16	4	20
GENERAL PARALYSIS:			
Tabetic type	10	2	12
Cerebral type	22	2	24
PSYCHOSES WITH HUNTINGTON'S CHOREA	1	1	2
PSYCHOSES WITH BRAIN TUMOUR	....	1	1
PSYCHOSES WITH OTHER BRAIN OR NERVOUS DISEASES:			
Paralysis agitans	1	....	1
Encephalitis lethargica	4	1	5
ALCOHOLIC PSYCHOSES:			
Acute hallucinosis	5	1	6
PSYCHOSES WITH OTHER SOMATIC DISEASES:			
Delirium with infectious disease	....	1	1
Post–infectious psychosis	....	2	2
Exhaustion delirium	2	4	6
Delirium of unknown origin	1	....	1
Chronic myocarditis	1	....	1
Rheumatoid arthritis	....	1	1
Pyelitis and double pyelitis	2	....	2
Pneumonia	1	....	1
Pyorrhoea and oral sepsis	3	1	4
Oral sepsis and otitis media	1	....	1
Lung abscess	1	....	1
Pernicious anaemia	1	....	1
Toxaemia of pregnancy	....	1	1
Puerperal sepsis	....	1	1
Chronic splenic abscess	1	....	1

Form of Disorder.	Male.	Female.	Total.
MANIC–DEPRESSIVE PSYCHOSES:			
Manic type	17	15	32
Depressive type	7	6	13
Mixed type	....	1	1
Circular type	1	....	1
INVOLUTIONAL MELANCHOLIA	2	9	11
SCHIZOPHRENAL:			
Paranoid type	9	1	10
Catatonic type	37	23	60
Hebephrenic type	15	7	22
Simple type	2	....	2
Atypical	2	2	4
PARANOIA AND PARANOIC CONDITIONS	33	6	39
EPILEPTIC PSYCHOSES:			
Deterioration	3	3	6
Clouded states	4	2	6
PSYCHONEUROSES AND NEUROSES:			
Hysterical type	1	....	1
Psychasthenic type	....	1	1
Neurasthenic type	1	....	1
Anxiety neurosis	1	....	1
PSYCHOSES WITH CONSTITUTIONAL PSYCHOPATHIC INFERIORITY	2	....	2
PSYCHOSES WITH MENTAL DEFICIENCY	9	6	15
UNDIAGNOSED PSYCHOSES	1	....	1
NOT INSANE:			
Epilepsy with psychosis	....	....	....
Chronic alcoholism without psychosis	1	....	1
Drug addition without psychosis	8	5	13
Constitutional psychopathic inferiority without psychosis	1	2	3
Mental deficiency without psychosis	4	2	6
Fetichism	1	....	1
Indecent assault	1	....	1
Simulated psychosis	1	....	1
Incest	1	....	1
False pretences	1	....	1
(?) Brain Tumour	1	....	1
Encephalitis lethargica	....	1	1
Total	244	118	362

TABLE No. 13

SHOWING NUMBER ALLOWED OUT ON PROBATION AND RESULTS IN 1929

Results.	Male.	Female.	Total.
Discharged, recovered	53	32	85
Discharged, improved	41	30	71
Discharged, not improved	6	2	8
Returned to hospital	15	15	30
Still out at close of year	45	35	80
Not insane	2	12	14

TABLE No. 14

RECORDS OF DEATHS DURING 1929

Register No.	Sex.	Age.	Years.	Months.	Days.	Cause of Death.
4278	M	70	....	2	26	Senile Dementia, Chronic Brain Atrophy.
3492	F	77	....	3	12	Senile Dementia, Chronic Brain Atrophy.
4344	M	79	....	....	27	Senile Dementia, Chronic Brain Atrophy, Influenza.
4374	M	73	....	....	7	Senile Dementia, Chronic Brain Atrophy.
4309	F	66	....	2	22	Chronic Pulmonary Tuberculosis.
2720	F	28	5	7	19	Pulmonary Tuberculosis, Chronic Bronchiectasis, Lung Abscess.
4287	M	77	....	3	12	Senile Dementia, Chronic Brain Atrophy.
4099	F	14	....	9	17	Cerebral Tumour, Internal Hydrocephalus, Coma.
4363	F	58	....	....	25	Lobar Pneumonia, Cellulitis of arm and Septicaemia.
4380	M	52	....	....	10	Cardiac Failure, Syncope; Lobar Pneumonia.
4385	M	25	....	....	3	Acute Mania, Exhaustion.
2769	M	62	5	5	27	Acute Septic Meningitis; Probable extension of infection from a broken arm.
581	M	49	14	8	17	Auricular Fibrillation, Cardiac Failure; Fatty degeneration of the heart.
4407	M	60	....	....	1	Terminal Broncho–Pneumonia; Cerebral Arteriosclerosis.
4288	M	45	....	4	17	General Paralysis of the Insane, Exhaustion.
4399	F	58	....	1	7	Hypostatic Pneumonia, Brain Tumour.
4408	M	77	....	....	13	Lobar Pneumonia, Arteriosclerotic Dementia.
3546	F	44	2	5	27	Pulmonary Tuberculosis.
4369	F	33	....	2	18	Acute Suppurative Appendicitis, Septic Thrombosis, Gangrene of gut and Peritonitis.
1874	M	58	8	1	22	Cancer of Stomach, Exhaustion.

Register No.	Sex.	Age.	Years.	Months.	Days.	Cause of Death.
2006	F	71	8	7	....	Ruptured Duodenal Ulcer with haemorrhage, Huntington's Chorea, Chronic Brain Atrophy.
2613	F	29	6	2	21	Pulmonary Tuberculosis, Exhaustion.
4442	M	21	....	....	7	Dementia Praecox (Catatonic), Exhaustion.
4449	F	18	....	....	12	Status Epilepticus, Exhaustion.
4343	M	70	....	4	17	Hemiplegia; Cerebral Thrombosis.
4115	F	71	1	....	....	Cerebral Thrombosis, Arteriosclerosis.
3870	F	29	1	8	18	Broncho–Pneumonia; Dementia Praecox (Catatonic).
3590	M	49	2	6	26	Apparently Arteriosclerosis.
4453	M	58	....	....	23	Arteriosclerosis, Chronic Brain Atrophy.
4462	M	22	....	....	11	Septicaemia, Cellulitis of arm.
4469	F	24	....	....	4	Post–infectious Psychosis, Exhaustion, Measles.
4381	M	32	....	3	10	Malarial Inoculation; General Paralysis.
4314	F	43	....	6	2	General Paralysis; Malarial Inoculation.
4427	M	47	....	1	21	General Paralysis of the Insane.
4293	M	61	....	6	29	Chronic Myocarditis; Fatty Degeneration.
4375	M	51	....	4	28	Broncho–Pneumonia; Dementia Praecox.
3576	M	72	2	8	7	Myocardial Degeneration, Syncope; Senile Dementia; Erysipelas.
4025	M	57	1	4	3	Auricular Fibrillation; Arteriosclerosis.
4013	F	67	1	4	13	Secondary Carcinoma of femora and lung, Exhaustion; Carcinoma of breast.
1134	M	49	12	2	....	Tubercular Ischio–rectal abscess, Sinuses; Chronic Suppuration, Exhaustion.
4383	F	31	....	4	17	Shock; Multiple Fractures. Fell from third storey window.
4490	M	65	....	....	21	Broncho–Pneumonia; Cerebral Arterio–sclerosis, Paralysis.
3935	M	34	1	7	23	Broncho–Pneumonia, Heart Failure; Dementia Praecox; Atrophy of Brain.
4492	M	56	....	....	28	Myocardial Degeneration, Hypostatic Pneumonia; General Paralysis.
4493	M	44	....	1	11	Multiple self–inflicted cutaneous abrasions, Streptococcal Septicaemia; General Paralysis.
4530	F	33	....	....	11	Toxaemia; Exhaustion; Psychosis complicating pregnancy and child–birth; Septic throat.
4209	M	42	....	11	15	Heart Failure, Myocardial Degeneration; General Paralysis of the Insane.
4534	M	26	....	....	14	Toxaemia resulting from large lung abscess complicating pneumonia.
4541	F	69	....	....	20	Broncho–Pneumonia; Cerebral Thrombosis.
1880	M	57	9	3	12	Broncho–Pneumonia; General Paralysis.
4540	F	41	....	....	26	Multiple abscesses of right lung; toxaemia; Exhaustion; General Paralysis.
4496	F	31	....	2	2	Acute Bronchitis and Pneumonia; General Paralysis of the Insane.
4501	M	52	....	2	7	Heart Failure, Erysipelas; General Paralysis.
4478	M	46	....	3	13	Chronic Myocardial Degeneration and Aortitis, Syncope; General Paralysis of the Insane.
4052	M	59	1	6	14	Chronic Pulmonary Tuberculosis; Exhaustion.
4589	M	58	....	....	5	Broncho–Pneumonia, Toxaemia.
4592	F	16	....	....	6	Cardiac Failure, Exhaustion; Dementia Praecox (Catatonic).
591	M	35	15	2	20	Broncho–Pneumonia, Toxaemia; Epilepsy.
4200	M	70	1	1	20	Myocardial Failure, Arteriosclerosis.
1269	M	37	11	10	15	Accidental scald of perineum and buttocks; Epilepsy with deterioration.
2295	M	26	8	2	....	Status Epilepticus, Exhaustion.
1604	M	48	10	6	....	Status Epilepticus, Exhaustion.
4645	F	26	....	....	5	Acute Exhaustion, Hyper–Pyraexia; Exhaustion.
4647	F	31	....	....	7	Acute Exhaustion Psychosis; Childbirth, Retained Placenta; Parametritis.
4329	F	41	....	....	15	Dementia Praecox (Catatonic type); Malnutrition, Exhaustion, Diarrhoea.
3568	M	67	3	1	23	Broncho–Pneumonia, Cardiac Failure.
3017	M	25	5	1	27	Tuberculosis Broncho–Pneumonia, Exhaustion.
4523	F	66	....	4	19	Broncho–Pneumonia, Arteriosclerosis.
2768	F	51	6	3	6	Syncopal Attacks, Cardiac failure; low grade congenital imbecile, obesity.
4575	M	64	....	....	6	Broncho–Pneumonia, Cardiac failure; Generalized Arteriosclerosis.
4663	M	47	....	....	23	Tabo–Paresis, Malarial Inoculation, Syncope.
4136	M	24	1	6	13	Pulmonary Tuberculosis, Exhaustion.
1775	F	55	10	....	27	Pulmonary Tuberculosis, Exhaustion.

DENTAL DEPARTMENT AT THE PROVINCIAL MENTAL HOSPITAL, PONOKA
SUMMARY OF WORK DONE DURING 1929

Number of patients examined	No record kept.
Number of patients given treatment	735
Number of prophylactic treatments	124
Number of fillings	109
Number of extractions	812
Number of extractions under general anaesthetic	22
Number of new dentures constructed	58
Number of dentures repaired	14

Provincial Mental Institute, Oliver

(Chas. P. Fitzpatrick, M.D., *Medical Superintendent*)

On the first day of January, 1929, there were in residence 204 male patients. During the year there were two re-admissions, 65 transfers from the Provincial Mental Hospital, Ponoka, 4 probated, 7 deaths and 3 transfers from this institution to the Provincial Mental Hospital, Ponoka, leaving in residence on the last day of December a total of 257 patients. The average number of patients in residence during the year was 250 and the average staff 39. The total number of hospital days was 91,049. The daily cost per patient for the year was 82.4 cents.

On August 1st the working hours of the attendant staff were changed from 72 hours per week to 55 hours per week. This reduction in working hours was accomplished by increasing the attendant staff by 4. It has proven a very satisfactory arrangement, and is preferable from both the administrative and staff points of view to an 8-hour day.

The health of the institutional employees and patients has been good. There have been no serious epidemics or outbreaks of disease. Of the 4 patients probated, three have carried on quite successfully in the community and one was unable to obtain work owing to the unemployment situation existing last fall. This patient returned to the hospital, and was cared for during the winter.

The medical superintendent, Dr. D. L. Dick, resigned in May to take up post-graduate work in neurology with a view to entering general practice. He had been associated with the hospital for a number of years, and his resignation was regretted. The present incumbent was appointed to succeed him on June 1st.

Realizing that the useful occupation of the patients is a sovereign remedy for most types of mental disorder and results in a decrease in destructive and refractory tendencies with a consequent improvement in behaviour, an endeavour was made to increase the number of patients occupied in the various services of the hospital. About 50% more patients were found outside work last year, and during the bad weather a system of physical culture was organized on the various wards. The physical exercises worked out very satisfactorily, and effected an improvement in the behaviour and conduct of practically all patients, and especially of the refractory types. Clothing repairs, mattress covers and repairs to bedding, etc., are all done in our sewing department, which is staffed by patients. Recreation was also provided during the fine weather by outdoor games on the recreation field. Checkers, cards, etc., are played on the wards during inclement weather. Papers, magazines and books are also available. During the fall and winter months a number of concerts were given for the patients by various Edmonton organizations. The Salvation Army Citadel Band also favored us with a concert during the summer.

The appearance of the ward interiors was improved during the year by replacing the existing floors with battleship linoleum. Pictures were purchased and hung in the various wards, thus adding to their home-like appearance. In one patients' dining-room the long tables were replaced by circular tables seating 6 patients each. These tables were equipped with knives, forks and paper serviettes for each patient and a small centre-piece, on which was placed either a potted plant or a vase of flowers. The improvement in appearance and the greater variety of diet permitted by the use of knives and forks has been remarked on and appreciated by the patients.

There was a good deal of building during the year with many alterations and renovations in the power house, all tending towards improvement and more efficient operation. A new ward to accommodate 112 patients is in the course of erection, and with its connecting corridor should be completed and ready for occupation by June 1st of next year. A residence was built for the chief engineer and two cottages moved from the site of the new administration building, Edmonton, for the use of the Public Works staff here. The gardener's cottage was remodelled. New equipment in the power house included coal bunkers and elevators, also a Bellis and Morcom generator set with the capacity of 250 K.V.A. An oxy-acetylene welding outfit was purchased and two new hot water heaters, one for the domestic supply and the other for heating the buildings. In the laundry a new extractor was installed and two new sections added to the mangle. This latter has proven a big labor-saving, as it obviates the necessity of putting articles through the mangle twice. In the kitchen a steam kettle and potato peeler were added to the existing equipment, and a new bread rack was purchased for the bake-house. A new and improved cinema projection booth was erected in No. 3 building, thus reducing the fire risk and adding to the safety of the operator. While this was being built, the weekly picture shows were discontinued, but save for this period pictures were shown every week. A Ford truck with van body was placed in service, and a team of horses and a new democrat were purchased to cope with the increased garden land which was placed under cultivation.

The garden and grounds maintained their reputation established in former years, and were extended and improved by increasing the lawn areas and the building of new rockeries. A distinct improvement was effected along the front of the property by ploughing and cultivating the shoulders of the road and ditches with the idea next year of sowing this with grass. A good deal of excavation, including that necessary for 1,150 feet of water line, supplying fire hydrants, was performed by the patients under the direction of the garden staff.

A garage for the staff was erected during the year. It has accommodation for sixteen cars, is heated and lighted. A nominal rent is charged for accommodation. It has proved of great service and convenience, particularly during the cold months.

As a community and extra-institutional activity, two mental health clinics were established during the year, the medical and social services being supplied by the institution. The Edmonton clinic is located in the outdoor department of the University Hos-

pital and the Calgary clinic is located in the police building, in the same quarters as the Provincial baby clinic. In Edmonton we have had the co-operation of the University of Alberta, and the clinic has proved of great value in training social workers. These clinics fulfil three functions: First, to disseminate information in the community regarding the early diagnosis and treatment of mental defectives, mental disorders and neuroses; second, advice as to the treatment and management of the above disorders at home; third, the training of social workers, school teachers, etc., who are taking courses at the University of Alberta in psychiatry, mental deficiency and problem cases. The Edmonton clinic was begun in August, and dealt with 60 cases during the balance of the year. The Calgary clinic was not established until well on in October, and 25 cases were seen in that city. It is felt that a constructive advance has been made in initiating this work and that it amply repays the time and energy expended. These are the first mental health clinics established in Canada under Provincial Government auspices, and many favorable comments have been heard on the Department's progressiveness in this field.

For the year 1930 I would recommend that a kitchen and dining-room with passage connecting the existing building be erected. If this were done we could accommodate an additional 80 beds. Cottages for the bursar, laundryman and one of the chefs should be built. Steam presses are also required in the laundry if the staff is to be kept at its present level. More emphasis will be placed on occupational therapy during this coming year, and an attendant has been at Battleford during the closing months of the year 1929 taking a course in weaving, basket work, etc.

MOVEMENT OF PATIENTS, 1929

Month.	In Residence.	Re-admitted.	Transfer. In	Transfer. Out	Probated.	Deaths.
January	204	.....	.....	.....	.....	1
February	.....	.....	.....	.....	.....	2
March	.....	1	62	.....	.....	1
April	.....	.....	.....	.....	.....	1
May	.....	.....	.....	.....	.....	.....
June	.....	.....	3	3	1	.....
July	.....	.....	.....	.....	.....	.....
August	.....	1	.....	.....	2	.....
September	.....	.....	.....	.....	.....	1
October	.....	.....	.....	.....	.....	1
November	.....	.....	.....	.....	.....	.....
December	257	.....	.....	.....	1	.....
	.....	2	65	3	4	7

RECORD OF DEATHS, 1929

Bronchial pneumonia	2
Strangulation by hanging (self-inflicted)	1
Pneumonia	1
Carcinoma of stomach	1
Perforated duodenal ulcer	1
Arteriosclerosis	1
Total	7
Autopsies	2

DENTAL REPORT, 1929

Number of patients examined	214	Number of extractions	296
Number of patients given treatment	189	Number of general anaesthetics for extractions	24
Number of fillings	27	Number of artificial dentures	6
Number of prophylactic treatments	139		

Improvements to Grounds Year Ending 1929.

A 750-foot spruce hedge planted in and around nursery, 290 trees, 300 shrubs, and 700 perennials planted, with additional beds and borders. Roadside between grounds and Fort Trail seeded to grass. Over half a mile of both sides of trail brushed, ploughed and cultivated. Three tennis courts excavated and first coat of cinders applied. Excavation of basement for chief engineer's house. Four hundred and eighty feet extension of road to cottages. Temporary roothouse constructed with poles, 100ft. by 8ft. Building up low ground in and around garage, 135ft. by 100ft. by 2ft. deep. Rockery work from No. 3 building to power house. Bluffs around institute underbrushed and portion of willows grubbed out for ploughing. Water line for fire hydrants, 7½ft. deep by 1,140ft. long, excavated. Temporary extension added to horse stable. Basement soil from new building graded and surfaced with black soil. Barb-wire fence on west side of Fort Trail moved over 6 feet and re-erected to allow cultivation of roadside; 160 feet of ditch from power house to garage for heating system. Excavation for engine base in power house, 16ft. by 9ft. by 7ft. Excavation for coal elevator to power house, 8ft. by 5ft. by 6½ft. Work on road and grounds around service building. New concrete floor in potting shed. Summer fallowing and breaking small patches on recently purchased land south of the institute. Approximately 20 acres of roots picked and piled on farm. Unloading and hauling 6 cars of gravel and sand and 1 car cement. Stooking grain on Oliver Farm. Planting flowers on farm grounds. Cartage of milk and eggs from farm. One hundred and twenty tons of ice stored. Year's coal for power house unloaded from cars to elevator. Hauling power house cinders for road building. Transferring trees and shrubs from site of new building and fencing to protect grounds east of same. Cartage of commodities from spur track to store room.

Provincial Training School, Red Deer

(W. J. McAlister, M.D., *Medical Superintendent*)

MOVEMENT OF PATIENTS IN 1929

	Male.	Female.	Total.
Number actually present December 31, 1928	84	75	159
Admissions during the year:			
Voluntary admissions	11	9	20
Court commitments	1	....	1
Re-admissions	....	....	....
	96	84	180
Discharges, etc., during year:			
Discharged	....	....	....
Died	8	6	14
Paroled	1	2	3
Number actually present December 31, 1929	87	76	163

Wards of the Province	22
Wards of municipalities	121
Wards of Department of Dependent and Neglected Children	2
Wards of Department of Municipal Affairs	13
Private cases	5

CASES OF MENTAL DEFECT REPORTED AND ON FILE AS AT DECEMBER 31, 1929

Awaiting Admission:	Male.	Female.	Total.
Application and Approval received (complete files)	34	32	66
Applications only (incomplete files)	48	42	90
Court commitment cases	4	1	5
	86	75	161

Mental Defective Suspects reported:			
Reported prior to 1923	107	77	185

	Male.	Female.	Total.
Reported during 1923	27	32	59
Reported during 1924	20	13	33
Reported during 1925	14	10	24
Reported during 1926	29	29	58
Reported during 1927	17	15	32
Reported during 1928	22	31	53
Reported during 1929	29	35	64
	158	165	323

Suspects and applicants reported prior to 1923 are not shown in totals owing to the uncertainty as to their present whereabouts.

SUMMARY

	Male.	Female.	Total.
Mental defective residents at Red Deer	87	76	163
Applicants awaiting admission	86	75	161
Mental defective suspects reported to December 31st, 1929	158	165	323
Mental defective residents at Ponoka Institution	....	....	72
Cases reported, sex unascertained	....	....	8
Total number of known defectives	331	316	727

General Remarks.

There was little movement of population during the year 1929. This was due, as intimated in my report for the year 1928, to the fact that we had reached our maximum capacity under the then existing conditions. We had quite an appreciable number of admissions, but the vacancies, as will be seen, were mostly caused through the death of fourteen of our patients, all but three of whom were

of the idiot class; ten being from the infirmary ward. Practically all these children had some congenital physical defect which, coupled with their low mentality, rendered them an easy prey to such conditions as pneumonia, to which, as will be noted, a majority succumbed.

The number of cases of defectives and defective suspects has continued to increase, so much so, that at the end of 1929 we had a grand total of seven hundred and twenty-seven recorded. No special effort was made during the year to ascertain the number of defectives in any given area in the Province. Such a procedure, while it would give us some valuable information, and enable us to check more accurately the locale of existing mental deficiency, would but increase our difficulties in view of our limited accommodation at Red Deer.

The percentage of deaths is higher than for any previous year. This can be partly explained by overcrowding, a lack of the necessary facilities for handling the helpless type of defective, and by the high percentage of low-grade defectives which we have in the institution.

We have continued to have excellent co-operation from the various branches in reporting cases of deficiency as they arise. In this connection, I might mention the Department of Education, the Public Health Nursing Branch, and such other agencies as the Department of Dependent and Neglected Children, the Juvenile Courts, etc.

The increase to the infirmary, which construction was initiated in the fall of 1928, was concluded during the winter of 1929, giving us much needed space on our infirmary floor. It relieved the congestion somewhat, but unfortunately did not provide that additional accommodation of which we have stood in great need ever since our establishment at Red Deer. The delay in providing more accommodation has made efficient administration difficult, but I realize that such delay was due more to a lack of policy as to the future location of the institution rather than to any failure on the part of the Government to appreciate the urgency of our needs. With the arrival of spring, however, it was seen that some steps must be taken to meet, to some extent, the demand for more accommodation, and although the future policy had not been fully defined, an addition to the east wing of three floors and the building of a boys' cottage were authorized.

The additional floors of the new wing were occupied in November, 1929, but we were unable to make use of the cottage until February, 1930. The cottage was planned to accommodate some twenty-five farm boys, the second floor to be used for male staff quarters and school rooms. Heretofore much valuable space had been taken up by the male staff and space for school work within the main building, hence the building of the cottage released this space for the use of the patient population, either for day room or dormitory purposes.

Owing to our overcrowded condition, however, the new construction relieved the congestion only. It did not enable us to increase our school population to the extent it would otherwise have done, provided there had been no overcrowding.

We still continue to house our female staff on the top floor of the main building. Considering the arduous nature of the work in which our nurses are engaged, it is felt by your superintendent, that some consideration should soon be given to the building of a suitable nurses' home. Such a building would give us an entire floor which could be used for the institutionalizing of more of the high-grade social delinquent type.

A violet ray lamp was installed this year by the Department of Public Works. We hope that this will be of real value to us in connection with some of our cases of malnutrition. Owing to the changes necessary at the time of installation, we were unable to carry on much active work along this line during 1929. We hope, however, to make full use of this valuable method of physiotherapy during the winter of 1930.

A Victor radio was also purchased and placed in the main building. This, together with a series of loud speakers to the various floors, has done much to provide entertainment and bring good cheer, especially to those children who are capable of appreciating music, but who, because of their infirmities, cannot be taken to the gymnasium or other places where such entertainment is provided.

The visiting committee visited the institution during the year, and made the usual thorough inspection. The chairman expressed his satisfaction at the general state of the school and of its management.

There were no cases presented for eugenic sterilization, due to the decision of the Eugenics Board to proceed cautiously and make careful preparations prior to initiating any active work along this line.

Institutional Progress.

The general work of the institution has proceeded quite smoothly. Although there have been many changes in the staff, these changes were due more to the arduous and discouraging nature of the work than to any general grievance. In connection with the all too frequent resignations, it is possible the situation could be partially met if we could provide adequate facilities for rest and recreation for all resident members of the staff. At the present time the accommodation can not be considered entirely satisfactory, as the staff quarters are, and have always been, on the top floor of the main building of the institution.

The work dealing directly with the care and treatment of the children has been carried out satisfactorily. The opening of the new school rooms gave added impetus to the sense training work for the lower grade cases and vocational work for the higher grade girls. We are badly in need of some such facilities to carry on vocational work among the boys. We feel this need especially in the winter months, when activities out-of-doors are more or less at a minimum.

Although we have had a rather high death rate, the general health of the children, especially of those with fewer physical defects, has been good. We had an outbreak of diphtheria in the early spring, which gave us considerable alarm. Both the staff and patients were attacked, but prompt prophylactic measures and

treatment checked its spread. Fortunately there were no deaths. The cause of the outbreak was unknown, but immediate steps were taken to re-immunize a large number of the children against possible future invasion. There were no other outbreaks of disease of a contagious nature during the year.

The future outlook for the work appears quite bright. The public feel that an honest attempt is being made to train all the children admitted to the school. Certainly all those who have had children admitted are quite satisfied with what is being done for them. We will, however, have to consider a continued programme of building expansion, as there are many urgent cases demanding institutional care. In addition, we should seriously consider increased accommodation for the high-grade delinquent and potentially delinquent girls. As soon as the Eugenics Board begins to function, I look forward to a more rapid movement of this type of our population. It will also be necessary to provide extra institutional supervision, or some follow-up system, so that these girls, when sterilized and discharged, would be given an honest opportunity to maintain themselves outside the institution.

General Requirements.

Our requirements will depend entirely upon the decision of the Department, whether or not we will remain in our present established location at Red Deer. Should we remain here, I would urge that we proceed at the earliest possible moment with the building of an infirmary capable of accommodating from seventy-five to eighty of our infirmary type of patient. This would minimize the danger, as it as present exists, of housing the more or less helpless type of patient in a semi-fireproof building. It would also take care of our epileptic feeble-minded patients, of whom we have quite a high percentage.

We are also badly in need of an increase in acreage to give us scope for additional vocational work for a certain class of our feeble-minded boys.

The summary of revenue and expenditure, which is herewith enclosed, should be of value, as it will enable you to see at a glance the financial turnover for the year.

AGES OF NEW ADMISSIONS

	Male.	Female.	Total.
Under 5 years	1	1	2
5–10 years	7	3	10
10–15 years	1	3	4
15–20 years	3	....	3
20–25 years	....	....	....
25–30 years	....	....	....
30–35 years	....	2	2
35 years and upwards	....	....	....
Totals	12	9	21

AGES OF TOTAL POPULATION

	Male.	Female.	Total.
Under 5 years	1	2	3
5–10 years	10	13	23
10–15 years	26	14	40
15–20 years	24	13	37
20–25 years	14	18	32
25–30 years	6	7	13
30–35 years	3	6	9
35 years and upwards	3	3	6
Totals	87	76	163

INFIRMARY TYPE OF PATIENT

	Idiot			Imbecile			Grand
	M.	F.	T.	M.	F.	T.	Total.
More or less helpless, requiring much individual attention	18	14	32	3	6	9	41

MORTALITY TABLE, 1929

Cause of Death.	Male.	Female.	Total.
Bronchial pneumonia	3	1	4
Toxic jaundice	....	1	1
Inanition	2	1	3
Influenza and cardiac failure	....	1	1
Pulmonary T.B.C.	....	1	1
Chronic hydrocephalus	....	1	1
Empyema	1	....	1
General debility	1	....	1
Pulmonary oedema	1	....	1
Total	8	6	14

SUMMARY OF INFORMATION

Mental Status (Patients)	
Idiot	81
Imbecile	62
Moron	25
M.D. and Psychotic	3
M.D. and Psychopathic	1
M.D. and Epileptic	36
Mongolian	10

Disease Incidence in Family History	
Epileptic	9
Insanity	21
Mental Defect	73
Neuropathic	18
Alcoholism	17
Psychopathic	3
Syphilis	6
T.B.C.	12
Deafness	3
Mutism	1

SUMMARY OF INFORMATION—PATIENTS

			Birthplace					Residence		Religion				
Total Population	Males	Females	Canada	Alberta	Britain	Foreign	Unknown	Urban	Rural	R. Catholic	Gr. Catholic	Protestant	Hebrew	Unknown
163	87	76	26	108	6	18	5	65	98	30	9	104	1	19

ECONOMIC STATUS—HOMES (PARENTS')

Comfortable	48
Marginal	65
Dependent	47
Unknown	3

Provincial Special Hospital, Edmonton

(F. H. H. Mewburn, M.D., *Medical Superintendent*)

The year 1929 opened with the hospital well filled, and this condition was maintained till the building alterations of the summer, when the number was reduced to about two-thirds of its capacity. A few of the patients had reached the stage where surgery was indicated, and they were operated upon with considerable improvement in their disabilities. These operations were performed in the operating room of the University Hospital. Owing to fine weather appearing early in the year, it was possible to get the patients out on the verandahs in February. During the year a number of patients gave blood for the preparation of poliomyelitis serum, which was manufactured in the Provincial Laboratory.

The usual Christmas celebrations were held as in the previous year, and afforded a great delight to the patients and great interest to a large number of friends of the institution who were present.

During the summer the heating and ventilating of the building was changed. The two large wards were also cut up into several smaller wards. This was done on account of the great discrepancy in the age of the patients, which varied from forty years to three years, and also to minimize the dangers of infectious disease. On account of building the addition to the University Hospital, the building was moved some forty feet south and placed on a concrete foundation and over a basement. During this moving the care of forty in-patients was carried on successfully with no interruption of water, light, sewage or gas services. The building was also connected with the University Hospital by means of a covered corridor.

Admissions during the year 1929	55
Discharged during the year 1929	72
Deaths during the year 1929	1
Out-patients treated	81
Consultations to out-patients	264
Operations performed	5

During the year the hospital received many donations from societies and individuals.